



Immigrants' use of the General Practitioner Scheme

- **A Mixed Method study analyzing access of Primary Health Care service facilities
in acute but not life-threatening medical situations**

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Dissertation for the degree of Philosophiae doctor (PhD)

January, 2012

Oslo, Norway

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*Series of dissertations submitted to the
Faculty of Medicine, University of Oslo
No. 1324*

ISBN 978-82-8264-313-9

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I ACKNOWLEDGEMENTS

Through the years of work with my PhD project, I have received support from family, friends, and colleagues.

Primarily I would like to express my sincere gratitude to my supervisors, professor John E. Berg and professor Bjørn Myrvang, who have given the confidence to work on my own but have always been available when I began to lose track. During the entire process my supervisors always supported me morally and academically. Thanks to them I have gained knowledge and research experience.

Prof. Berg has all the qualities of an excellent supervisor. I have learned a lot from him both because of his willingness to share knowledge and convey it in a clear, straightforward manner.

I have long admired professor Myrvang, who was my medical supervisor 25 years ago when I worked as a nurse. His advice, academic and otherwise, over the last three years has made it possible for me to be where I am today. Prof. Vidar Lehman I would like to give my gratitude for the moral support when I initiated the idea to develop the PhD proposal.

Furthermore I want to thank professor Bjørgulf Claussen that he gave me valuable guidance and advised me in the last stages of my thesis.

In addition to my supervisors, I have had the pleasure to co-operate with two other researchers: my co-authors Geir Godager and Haci Akman, who have given me keen advice with my articles, shared my frustrations, and always been patient during my process of learning.

I am grateful to Karin H. Hjelde, Arna Desser, and Abraham Adoram for proofreading my articles and for Nina Misvær for reading my thesis and all her important feedbacks!

Furthermore I wish to thank the Norwegian Centre for Minority Research and the University College Oslo and Akershus for their understanding and the good working environment.

My thanks go to all participants in the study, to Henrik S. Foss for testing and advising me in GP-specific questions, librarian Maria Isachsen, the National Centre for Emergency Primary Health Care, Council for Immigrant Organizations in Oslo, Norway Statistics, and NAV. Without the help and data they provided, this project would not have materialized.

My deepest gratitude goes to the Norwegian centre of imported and tropical diseases and the Norwegian Centre for Minority Research for financing the project during the development stage.

When accepted as a PhD project, the Norwegian ExtraFoundation has financially supported this project 100 percent, and only with the grants, distributed by Nasjonalforening for Folkehelse, this PhD project was made possible. I am very grateful for the trust shown in me.

Without the support of my close friends and family, their encouragement, patience, help, and the understanding environment they created (and which I needed so badly), I would not have managed.

Finally, yet most important without any doubt, my love and thanks go to my husband for being patient, supportive, and accepting my long working hours for months on end. I think he too has longed for this moment as much as I have!

II. ABSTRACT

Immigrants' use of the General Practitioner Scheme

Introduction:

The General Practitioner Scheme (GP Scheme), a Norwegian patient list system, was introduced in 2001. The GP Scheme aimed to improve the quality of services provided by the GPs by enabling legal residents of Norway to establish continuity in doctor-patient relationships and to ensure rational access and efficient referral and use for secondary health services. Growing diversity in the population could present challenges as the health care system is faced with patients with a variety of backgrounds, and who may have different expectations and needs.

For both immigrants and natives, access to health services and the ability to understand and use health information is vital. As the population grows more diverse, accessibility to the national health system needs to be monitored. In Norway the National Insurance Scheme, a universal, centralized, tax-funded health system, insures all long-term residents.

Aim:

The aim of the project is to examine the access for Norwegian immigrants to the General Practitioner Scheme.

Methods:

The project is a Mixed Method project that combines one quantitative study and two qualitative studies.

Interviews with local GPs and cultural mediators from major migrant populations provided data for the qualitative part of the project. Interviews focused on perceptions of migrants' health literacy and obstacles they face in navigating the health-care system.

Quantitative data for the analysis came from the reimbursement registry for the years 2006 and 2007. That data were linked with data from the population registry and defined for both the largest migrant populations and the total population.

As explanatory factors, we tested the model for age, gender, length of residency, and country of birth.

Results:

Qualitative results indicate that GPs define migrants in terms of socio-cultural differences and reported that migrants often seem helpless, which they attributed to language difficulties and differences in expectations and a systematic failure to coordinate care (Goth, Berg & Akman, 2010). According to cultural mediators, integration in the GP Scheme varied with duration of residence, adequacy of patient-physician communication, country of origin, reason for migration, health literacy, received and perceived information, and language proficiency (Paper II; Goth 2010).

The *quantitative results* from the interfaced register database show diverse patterns of utilization of an emergency ward depending on the country of birth, the duration of residence, age, and gender. The utilization patterns seem to differ regardless if their birth countries are from nearby or remote countries (Paper III).

Discussion:

The findings indicate that there are large variations in usage patterns both between and within the different immigrants. Duration of residence has substantial influence on the probability of contacting an emergency ward (EW). Different minority populations have different average durations of residence likely to account for some of the differences found in EW use between populations. Many migrants have difficulty understanding or using the GP Scheme and fail to comprehend the information about it provided for them by national authorities (Goth, 2009).

Not all individuals are equally well informed about the organizational structure of the health sector. Immigrants who have recently arrived in Norway are likely to be least informed about how basic services are provided and which practice they are enrolled in. These factors might contribute to seeking help at the emergency ward. Adapting information about the healthcare system to migrants, and other challenged population segments, could address these problems.

Weaknesses of the quantitative part of the study include its reliance on country of birth for the criterion of ethnicity and the inability to account for residents of Oslo not utilizing health services during the years 2006 and 2007. Weakness of the qualitative part is the restraint from audio-visual recording devices during the interviews.

This study illuminates patterns in the use of GP versus emergency ward services by migrants, provides a deeper understanding of the factors affecting these patterns, and points to avenues of further investigation.

III. SAMMENDRAG (abstract in Norwegian)

Innvandrerens bruk av fastlegeordningen

Innledning:

Fastlegeordningen er et norsk pasient-liste system som ble introdusert i 2001. Ordningen tok sikte på å forbedre kvaliteten på tjenestene levert av allmennlegene ved å tilrettelegge for kontinuitet i lege-pasient relasjoner og for å sikre rasjonell bruk av sekundære helsetjenester. Tilgang til helsetjenester og informasjon er grunnleggende for både innvandrere og norskfødte personer. Det økende mangfoldet i befolkningen fører til utfordringer i systemet. Etterhvert som mangfoldig øker, bør tilgjengeligheten til helsetjenester overvåkes.

Mål:

Dette doktorgradsprosjektet ønsker å undersøke innvandrernes tilgang til fastlegeordningen.

Metoder:

Prosjektet kombinerer to kvalitative og en kvantitativ studie ved hjelp av metoden Mixed Methods. Kvalitative data er basert på intervjuer med fastleger i Oslo området og nøkkelinformanter fra innvandrersorganisasjoner.

Intervjuene belyser tilgjengeligheten av fastlegeordningen og som danner grunnlag for modellen som ble testet i den kvantitative delen.

Kvantitative data er hentet fra konsultasjonsregisteret (NAV) for årene 2006 og 2007. Disse data ble koblet ved hjelp av personnummeret med demografiske data fra folkeregisteret. SSB koblet og anonymiserte data før utlevering. Datasett er

definert for både de største gruppene innvandrere og befolkningen totalt.

Helsetjenestetilbudet på lokalt nivå kan variere. For sammenlignbarhet er kun data fra Oslo inkludert i prosjektet.

Forklarende faktorer testet i modellen er alder, kjønn, botid i Norge og fødeland.

Resultater:

Resultatene viser et mangfoldig bruksmønster for nyankomne utenlandsfødte innbyggere. Kvalitative resultater tyder på at allmennleger definerer innvandrere i form av sosiokulturelle forskjeller og opplever at innvandrere ofte virker hjelpeløse, noe legene tilskrev språkproblemer og forskjeller i forventninger (Goth et al., 2010). Ifølge nøkkel- informanter som agerte som kulturelle oversettere, er integrasjon i fastlegeordningen avhengig av botid, oppfattet og mottatt informasjon, en tilfredsstillende pasient - legekommunikasjon, landbakgrunn, årsaken til migrasjonen samt helse-, lese- og språkkunnskaper. Hindringer som ble nevnt var ikke innfridde "rolle"-forventninger, språk og kulturelle forskjeller (Paper II).

Resultatene fra registerdatabasen viser at sannsynligheten for å kontakte legevakten varierer etter botid, alder og kjønn også etter justering for fødeland (Paper III). Bruk av legevakt øker ved alder over 65 år, men varierer i forhold til fødeland.

Bruksmønstre ser ikke ut til å avhenge av om pasienten har opprinnelse fra nærliggende eller fjerntliggende land.

Diskusjon:

Våre funn tyder på at det er store variasjoner i bruksmønster både mellom og innenfor de forskjellige minoritetsgrupper. Botid har vesentlig innflytelse på sannsynligheten for å kontakte legevakten. Informasjon om fastlegeordningen og den

tildelte fastlege ble ikke oppfattet som forventet av nasjonale myndigheter (Goth, 2009). Innvandrere som nylig har ankommet til Norge, er mest sannsynlig mindre informert om organiseringen av helsesektoren, og kan være uvitende om hvilken praksis han eller hun er en del av, samt rollen til legevakten. Dette kan være en medvirkende faktor til hvorfor mange nyankomne innvandrere søker hjelp på legevaktens akuttmottak. Det stadig økende mangfoldet i befolkningen er en utfordring og krever tilrettelagt informasjon.

Den primære svakheten i modellen er definisjonen av variabelen etnisitet da "fødeland" ikke vurderer variasjonen i et komplekst samfunn. En annen viktig begrensning av data er at kun personer som har benyttet helsetjenesten i årene 2006 og 2007 er inkludert i datamaterialet. Undersøkelsen belyser bruk av fastlegeordningen ved den dominerende minoritetsbefolkningen i akutte situasjoner og gir en dypere forståelse av determinanter for bruk av fastlegeordningen.

IV. LIST OF PUBLICATIONS (peer reviewed and non- peer reviewed)

List of peer reviewed publications being part of the thesis:

2010

Paper I.

Goth, U. G. S., Berg, J. E. & Akman, H. (2010). The intercultural challenges of general practitioners in Norway with migrant patients. *International Journal of Migration, Health and Social Care*, 6(1), 26-33.

2011

Paper II.

Goth, U. G. S. & Berg, J. E. (2011). Migrant participation in Norwegian health care: A qualitative study using key informants. *European Journal of General Practice*, 17(1), 28-33.

2012 (submitted)

Paper III.

Goth, U.S. & Godager, G. (n.a.). Use of Primary Care Emergency Services in Norway: Impact of Birth Country and Duration of Residence.

(Manuscript submitted for publication and under peer review in *European Journal of Public Health*)

List of non peer reviewed publications with the aim to increase understanding of participants:

Appendix 10.1.

Article in UTPOSTEN

Goth, U. G. S. (2010). Informasjon om fastlegeordningen til flerkulturelle befolkningsgrupper: En utfordring for helsevesenet [Information on the patient list system to diverse groups in the population: A challenge to the health system]. *Utposten*, 39(5), 20-23.

Appendix 10.2.

Dissemination to the target group at UTROP

Goth, U. S. (2010, 16.-29.September).

Er du syk?- Gå til fastlegen! [Do you feel sick – visit your family doctor!] *Utrop - Nyheter på lettnorsk* [Norway's first multicultural newspaper], p. 11.

V. ABBREVIATIONS AND GLOSSARY

| | |
|---|-------|
| Emergency Ward | EW |
| General Practitioner | GP |
| Regular General Practitioner Scheme (also called patient list system) Scheme | GP |
| The Norwegian Health Economics Administration | HELFO |
| The Norwegian Labour and Welfare Administration | NAV |
| Norwegian health care system | NHCS |
| Assigned Regular General Practitioner | rGP |
| Statistics Norway | SSB |

Change of abbreviation (articles and thesis):

During paper I and II, “ED” (emergency department) is used for “EW” (emergency ward). The reason for changing EW to ED was the publication of a glossary for pre-hospital and emergency medicine research by the University of Bergen in 2010.

During paper I, II, and III, I used “RGP” for “assigned GP.” Due to the publication of the previous mentioned glossary the abbreviation was changed to rGP. In other literature the rGP also can be abbreviated as GP (Letrilliart, Bacis, Mennerat & Collin, 2009; de Lusignan, Minmagh, Kennedy, Zeimet, Bommeziijn et al., 2001).

Glossary:

Assigned Regular General Practitioner – *fastlege*

Coordination Reform – *samhandlingsreform*

Emergency Ward/Emergency Department – *legevakt*

Equality – *like (descriptive perspective)*

Equity – *likeverdige (normative perspective)*

General Practitioner – *allmennlege*

Health Literacy - *helsefremmende allmendannelse*

National Insurance Scheme - *folketrygden*

Primary Health Care – *primærhelsetjeneste eller førstelinjetjeneste*

Primary care out-of-hours service or emergency primary care – *legevakt*

Regular general practitioner Scheme or patient list system - *fastlegeordning*

1. INTRODUCTION

1.1 Background

Over the last 30 years, Norway has shifted from a mostly homogenous population to one that is increasingly, ethnically diverse. This change has had an impact for the Norwegian healthcare system in all its various functions and services. In its National Health Plan (2007-2010), the Norwegian health-care system set as an ambitious core value the equitable provision and access to care regardless of patients' gender, ethnicity, social status, or place of residence, with prevention of illness and injuries as a key goal (Norwegian Ministry of Health and Care Services, 2006). As the National Health Plan (2007-2010) noted, considerable differences in population health along these parameters have been documented, and there are grounds to indicate that such differences correlate with different use patterns of health services.

On a weekly basis individuals can read in local and national papers about migrants poorly adapting or showing a lack of willingness to integrate into society. But how do we comprehend the word "adaption" or "integration," in particular with regard to the health system? Who or what should be adapted or integrated? Who tells the native population about the immigrant's experiences, and who sets the integration criteria? Who tells the immigrant about the system?

In the Norwegian health sector special attention is given to multiculturalism and collective rights (National Health Plan [2007-2010]). Despite a policy of equal treatment, minorities are often associated with stereotypes, in both the native population in general as they create powerlessness among health workers (Magelssen, 2008: p35). These stereotypes can inform (or misinform) both attitudes

within the health system and institutionalized policies. Achieving the goal of integration requires theoretical, empirical and policy perspectives (De Haas, 2010).

Immigrants not familiar with the local language may face special challenges in the presentation of their illness narrative. Language barriers can obstruct a patient's presentation of medical history in a detailed, organized, and coherent narrative.

Studies show that patients of ethnic minority descent access primary, secondary and tertiary medical care differently (Berg & Johnsen, 2004; Nielsen, 2010:p20; Blom, 2008:pp36-42), while another study (Adamson, Ben-Shlomo, Chaturvedi & Donovan, 2003) indicates that barriers for descendants of immigrants first occur in the referral stage at the GP's office.

When experiencing an acute but not life-threatening medical situation, patients in Norway are requested to contact their registered general practitioner (rGP). The out-of-hour clinics, serving as emergency wards (EW) for the primary health care service needs, only ought to be contacted in cases where the rGP is not available in time.

When a Danish study (Norredam et al., 2004) concluded that EW utilization is higher among some immigrant groups than others, it was challenging to understand why utilization patterns vary. With the aim to investigate how immigrants use the GP Scheme, a focus was set on equity of health services, obstacles perceived when accessing the GP Scheme, the rGPs opinion and the perception of various migrant key informants. Finally by using register data, we looked to see if immigrants differ in their propensity to visit the EW (when choosing between the service at the rGP and the EW) compared to the rest of the population, and if that result is influenced by their duration of residence in Norway.

1.2 Concepts and terminology

In this section, concepts and terminology are inclined and in alphabetical order, with the abbreviation following in parentheses. Concepts can be overlapping and consequently also the context of their definitions.

Acute but not life-threatening medical situations/ acute situation/medical emergency

The concept describes a situation where the individual experiences a need to receive medical help. This experience can be a worsening of a chronic disease or an acute situation – medically seen as not life-threatening. In Norway this form for medical aid is provided within primary health care. A national study (Eikeland, OJ., Holm Hansen, E., Press, K., Tønsaker, S. & Hunskaar, S., 2008) shows nearly 80% of all visits to an EW could be postponed until the next day and can be handled by the rGP. Data in this study refer to areas with a low density of migrants in Norway.

Assigned Regular General Practitioner (rGP)

In Norway, a general practitioner is, or should be, the first point of contact within the Norwegian health care system. A rGP holding a contract with the municipality is enrolled in the GP Scheme with a list of patients who are under his or her responsibility. Patients are assigned to (or choose) a rGP from the provided practitioner list. These rGPs then act as gatekeepers for specialist services. The rGP is obligated to act not only for treatment purposes but also as an overall health advisor with a holistic approach (Norwegian Directorate of Health, 2009 & Norwegian Ministry of Health, 2009).

The rGPs providing primary health care are able to prescribe drugs, provide referrals to specialists and hospitals, dispense preventative care, serve as a conduit for health education, and follow up with individual patients – all with a holistic view of both the patient's needs and efficient delivery of care. The rGPs' salary consists of remuneration from the local community for patients on the list in the form of a capitation payment, a fee-for-service as a reimbursement from the National Insurance Scheme, and a charge payable by the patient. Patients under the age of 16 are free of charge. Most GPs are self-employed as rGPs, often in group practices, and work on a fee-for-service basis. Only a few rGPs are municipal employees on a fixed salary, mostly in rural districts. Furthermore, only very few GPs work outside the GP Scheme.

The Coordination Reform

The Coordination Reform (Hanssen, 2008) has the overall aim of insuring “correct treatment at the correct time” by coordinating contact among providers of primary and secondary care. Meeting this challenge involves the coordination of various actors and administrative levels. This coordination is especially important for demographic groups identified as receiving substandard care. The white paper nr. 20 (St. meld. nr. 20 [2006-2007] “Nasjonal strategi for å utligne helseforskjeller”) noted that social inequalities in health are growing and that chronic disorders are most common in groups with low educational attainment, low income, and among the elderly. Many patients do not get the services they need partly due to the lack of coordination within the health system. This affects not only the elderly and chronically ill, but also the mentally ill, patients needing palliative medicine, and those who are substance-dependent. The Coordination Reform, as stated in the white paper nr. 47, establishes municipalities as the appropriate administrative level for the coordination of care

(Hanssen, 2008; Norwegian Ministry of Health and Care Services, 2006; Ministry of Health and Care Services, report nr. 47, 2009).

Culture

In this thesis culture is defined as a manner of believing, being, behaving, or acting with others as a continuous process.

The concept of culture as it is used in this thesis describes knowledge, values, and ways of handling situations learned from members of communities (Magelssen, 2008:p15).

Empowerment

Empowerment of health, a process to increase control over decisions affecting health, relates to expanding the ability of patients to make needed changes and take action in what influences their health. Empowerment involves a shift in focus from a negative-biased angle to a progressive-balanced one – generally with mutual gain. Within the immigrant population – and within the immigration process – this can be achieved by dialogue and cooperation. To achieve empowerment, cultural intermediaries can provide a bridge, promote reciprocal learning, and develop competencies. For immigrants, life in a new country needs to be meaningful, comprehensible, and manageable in order to sustain and experience good health (Antonovsky, 1979).

Equity and equality

Based on the context of the World Health Organization's "Health for All" policy, equity is defined as "a moral and ethical dimension" (Whitehead, 1992 & 2008). It refers to

differences that are unnecessary and avoidable but in addition are also considered unfair and unjust. Therefore, in order to describe a certain situation as inequitable, the cause has to be examined and judged to be unfair in the context of what is happening in the rest of society (Whitehead, 1992). Equality in distributing health service is seen as the principle of equal access, appealing to standardized distribution.

Ethnicity – selection by country of birth

For classifying the study population in this thesis (immigrants from predominant immigrant population), a discussion was undertaken between “race,” describing a group that in the past shared a common gene pool (having an impact on prevalence to certain diseases), and “ethnicity” (an important variable with reference to system adaption), sharing cultural and linguistic characteristics (Chaturvedi & McKeigue, 1994). Due to the accurate population denominator to assign the correct ethnic group the study population was defined by “country of birth” the best alternative possible. In this study “country of birth” distinguishes between immigrants and the majority population. The term “country of origin” is used when distinguishing between immigrants, their descendants, and the majority population.

General Practitioner (GP)

A GP is a primary-care doctor working in a medical office who takes care of various medical problems, including referring patients to specialists and hospitals. Nearly all of GPs are working in the role of an assigned GP (rGP) serving primarily patients registered on their list (see assigned general practitioner).

Health literacy

Health literacy is a combination of personal, cognitive, and social skills that are essential for individual motivation and ability to access, understand, and apply health information as well as to promote and maintain good health (Nutbeam, 2008).

It is also described as the ability to make sound health decisions in the context of everyday life – at home, in the public system, the market place, and the political area. “Health literacy is a critical empowerment strategy to increase people’s control over their health, their ability to seek out information, and their ability to take responsibility” (Kickbusch & Maag, 2006).

Low health literacy as a health risk belongs, according to Nutbeams theory, in clinical practice (Nutbeam, 2008). This theory is leading to the assumption that low health literacy belongs to high-risk group leading to unwanted health outcomes.

As immigrants come with different backgrounds and countries of origin, dominant cultural, religious, and belief differences exist between and within immigrant groups. Limited health literacy has been linked to worse health outcomes for a range of medical conditions and is more prevalent in specific racial and ethnic minorities (Paasche-Orlow & Wolf, 2008). The Norwegian Electronic Health Library (www.helsebiblioteket.no) has not released an official translation of the term, limited health literacy, in any of Norway's official languages. In the absence of an official translation, a local researcher (Pettersen, 2009:p92) has made an attempt to translate and define the term into Norwegian (helsefremmende allmendannelse).

Migrant, immigrant, emigrant and migrant population including migrants to Norway/group of immigrants and indigenous population.

The word immigrant and migrant derive from the Latin word “migratio” depicting the passing or coming into a country with the intention to stay. “A *migrant*, is generally defined as a person living temporarily or permanently in a country where he or she was not born, has acquired some significant social ties to this country” (Unesco, 2010).

This thesis considers the terms immigrant and migrant are interchangeable and defining every person to be a migrant when born outside Norway and later on in life migrated into the country. Not only migrants but also their descendants may face obstacles in the public health services. Supported by a study from Adamson et al. (2003) we assumed that descendants have their educational career from Norway and therefore not subject to informal barriers to the primary health care services, furthermore that barriers first occur at the secondary level of health care provision. *Migrants to Norway* represent in this study foreign-born residents excluding their decedents. *Migrant populations* on the other hand represent foreign-born residents and their local born descendants (Statistics Norway). An *immigrant* is defined as a person who settles in a country other than that in which he was born. In this project both migrant and immigrant are treated equally and used in accordance to the use in the text cited.

The “indigenous” population of Norway is defined as ethnic Norwegian.

National Insurance Scheme

The National Insurance Scheme is a government insurance scheme covering all citizens and legal residents residing in Norway for more than six months. This Scheme entitles members to a family allowance, pensions, and benefits in case of illness, accidents, and pregnancy and is financed by membership fees paid by

working individuals, employers' contributions, government allocations from general tax revenues, and by a special tax earmarked for health care. Hospital doctors in Norway have a fixed income with duty benefits. Non-hospital doctors are paid on a salaried basis with the salary composed of state, municipality, and patient paid parts. With the government setting reimbursement rates, physicians have little scope to charge patients more than the usual out-of-pocket consultation fee (National Insurance Scheme, 2011). The Ministry of Health determines health care policy and oversees the system, executed by four health regions (sørøst, vest, midtnorge, nord) and the municipalities.

Norwegian Health Economic Administration (HELFO)

The Norwegian Health Economics Administration (HELFO) is an institution directly linked to the Norwegian Directorate of Health. HELFO is responsible for payments to various health care service providers and individual reimbursements for defined drugs, dental services, and health services abroad. One of HELFO's major responsibilities is the Regular General Practitioner Scheme (GP Scheme) as HELFO administratively manages the Scheme while the responsibility for entering into agreements with GPs rests on the individual municipalities.

Primary Health Care

The structure of Norway's primary healthcare system today was mainly established by the Norwegian Primary Health Services Act of 1982, under whose terms 430 municipalities were given the responsibility to provide for primary health care for all residents within their boundaries. The responsibility includes health promotion and prevention, health clinics, emergency care, and immigrant health care. The scope of

the services encompasses general practice, pregnancy and antenatal care, health clinics for mother and child, and health promotion (Norwegian Directorate of Health, 2009). As S. Gillam has reported, countries investing heavily in primary health care have healthier populations than those that focus on developing specialist services (Kunnskapssenteret, 2010). All residents insured in the Norwegian Social Insurance Scheme are beneficiaries of primary health care (Norwegian Ministry of Labour, 2010) available to citizens and registered long-term residents. Primary health services are financed through grants from the national government, local tax revenues, reimbursements from the National Social Security System, and through out-of-pocket payments. All services for children under the age of 16 are free of charge. Service that is free of charge is also provided by school nurse services, baby clinics for infants, and health stations for youth (Norwegian Directorate of Health, 2009).

Primary Care out-of-hours service: Emergency primary care obtainable at the EW. Internationally the EW or emergency departments are anchored as hospital based services. In Norway the EW is part of the primary health care services. The concept of emergency primary care, offered during out-of-office hours, is for patients to get access to immediate medical care and receive essential medical diagnostics and treatment for acute illnesses or injuries.

The EW service is organized differently in Oslo and other larger towns versus in the district areas. In the larger towns and several municipalities the EW is situated in distinct locations, not in the rGPs work site. Furthermore, in larger towns GPs are employed in designated locations by the municipality. Only few services such as house visits are covered by duties of rGPs allocated for the shift to the EW. In Oslo,

which is the recruitment area for this study, the EW is organized as a safety net for the population and has a coordinating function for preventive and emergency assistance except for the pre-hospital services.

As shown in a national study (Eikeland et al., 2008), nearly 80% of all visits to an EW could be postponed until the next day and could be handled by the rGP. A Norwegian study (Welle-Nilsen, Morken, Hunskaar & Granas, 2011) shows that more than every fourth patient contacts the EW with minor ailments that could have been postponed.

Regular General Practitioner Scheme (GP Scheme)

In June 2001 Norway reformed its Primary Health Care services and introduced the GP Scheme, a contractual patient list system that formalizes the relationship between the patient and doctor, and which is anchored in the regulations of the GP Scheme for municipalities (NAV, 2009). Municipalities, the lowest level of government, are obligated to ensure the proper functioning of the Scheme. The object of the reform was to improve the quality of the services provided by GPs by enabling legal residents of Norway to have their own rGP. This facilitates continuity in doctor-patient relationships, especially important for people suffering from recurring or complex medical problems. Another aim of the reform is to ensure rational access (gate keeper function) and efficient referral and use of Norway's secondary health services. Patients can only switch rGPs twice per year. Each rGP is entitled to enroll only a distinctive amount of patients. By applying for residence or registering a change of address outside the municipality HELFO will provide the resident with information about the GP Scheme in Norwegian. Newborns will automatically be placed to the mother's affiliated GP. A copy of the original letter is available in appendix 10.8.

Statistics show that in 2010 only 0.4% of the Norwegian population was not enrolled in the GP Scheme (Helsedirektoratet, 2011). The rGP services are organized with statutory duty resting with the local district, while GPs have the responsibility for planning and coordinating a patient's care, preventative medicine, examination, and treatment (NAV, 2009). Data generated at HELFO during the reimbursement process for services are used for statistical purposes regarding development, expenditure and impact evaluation. This databank also provided information for the depending variable in the qualitative part of the study.

Variables – the operational categorization of variables used in sub-study III is based on the definitions from Statistics Norway (Statistics Norway, 2009):

- Immigrant is defined as: "Persons who are born abroad to two foreign-born parents, and who have moved to Norway."
- Birth country is defined as: "The mother's country of residence at birth."
- Norwegian-born residents are fractioned into Norwegian-born participants with one foreign-born parent, Norwegians born to Norwegian-born parents, and foreign-born to two Norwegian parents, including adoptees.
- Duration of residence is the time since migrating to Norway, at the time of consultation.

1.3 Immigration to Norway

“Immigration policy has basically been a national preoccupation, border control a part of sovereignty” (Brochmann & Kjeldstadli, 2008:p252). But migration, both immigration and emigration, is not a new phenomenon. The first census we have on immigrants in Norway was from the year 1865, showing them at 1.2 percent of the population; the majority was Swedish-born. By 1920 the immigrant population had increased to 2.8 percent. During the war there was little migration to Norway. In the year 1950, Norway counted only 1.4 percent of immigrants (St. meld. Nr. 15 [2008-2008], chapter 8.2). A small number of refugees from Eastern Europe (mostly from Poland, Czechoslovakia and Hungary) and labor migrants arrived after the Second World War. Since 1960 migration to Norway increased, first from Turkey and Morocco and later from Pakistan, all mostly laborers. In 1975 Norway closed its borders for unskilled labor. Predominant among immigrants coming during the 1980s and '90s were refugees, asylum seekers, or family members seeking family reunification from countries in Asia, Africa, Latin America, and Europe. By 1987 Norway received asylum seekers from 60 different countries, with the majority from Iran, Chile, Sri Lanka, and Yugoslavia. As of 1993 Norway faced decreased border control and increased labor mobility due to the enlargement of the EU with the addition of new Baltic member states. With further EU enlargement in 2005, the number of immigrants to Norway from the new member countries increased significantly. In 2006 the immigrant population increased to 8.9 percent (Brochmann & Kjeldstadli, 2008; Blom, 2008). By 2010 labor migrants originating from Poland were the largest immigrant group in Norway and 2 of 10 residents lived in Norway for

over 20 years and 4 of 10 residents migrated to Norway for less than 4 years (Statistics Norway, 2011).

Background information on immigrants and descendants in Norway:

Figure 1 describes the background information of immigrants and descendants as of January 1st 2007 (Statistics Norway). Based on the results of Adamson et al. (2003) only migrants and not their descendants are included in the study population of the present study, aiming to elucidate the access to the GP Scheme. Descendants have their educational career from Norway and are therefore not object to informal barriers within the GP Scheme and access to their rGP. Immigrants and decedents on the other hand may face obstacles within secondary and tertiary health care but those levels of health care are not part of the aim (see also chapter 1.2)

Please note: in the project only immigrants but not their descendants are included.

The largest immigrant groups in Norway, 1.1.2007. Absolute numbers

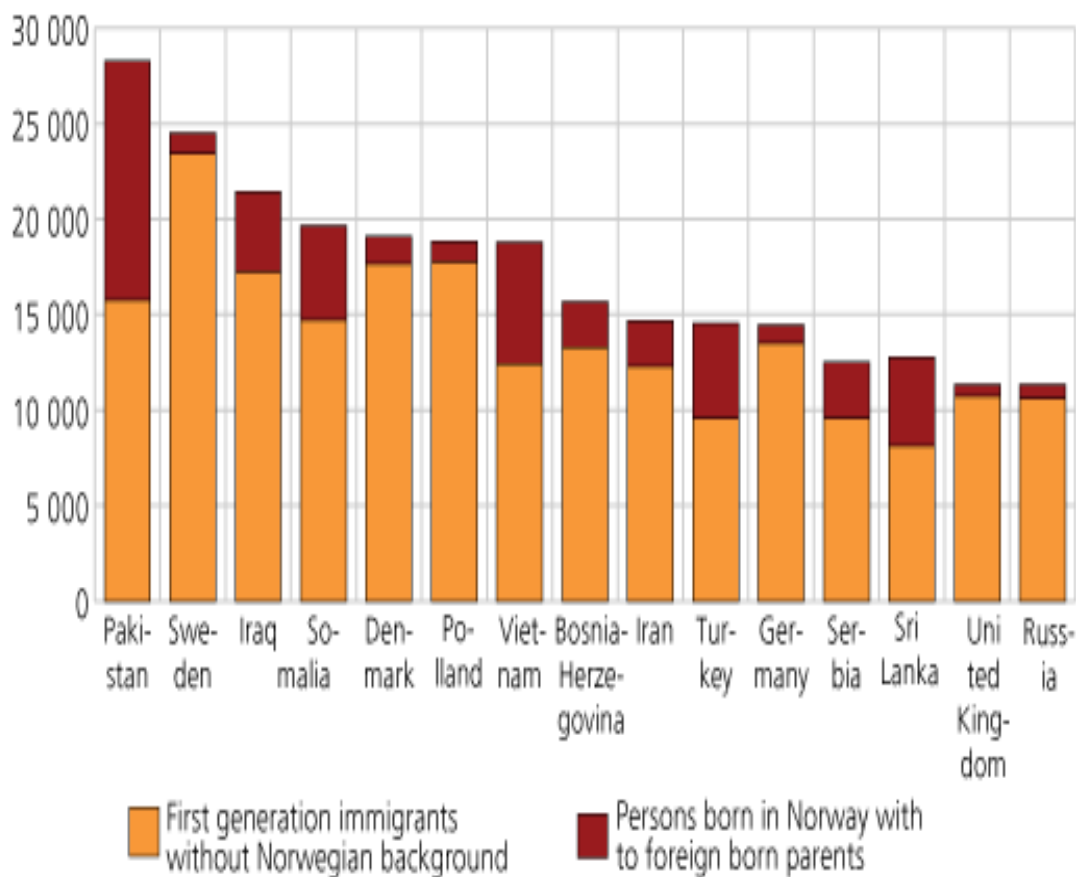


Figure 1 Source: http://www.ssb.no/emner/02/notat_200756/notat_200756.pdf (accessed 11.06.2011).

To compare and illustrate the change in immigration patterns the figure showing immigrants and descendants in absolute numbers by January 1, 2001 is enclosed in the appendices (figure 5 in chapter 10.9). This fast change might indicate the challenges the health system is facing.

Stemming from Statistics Norway, both figures 1 and 5 illustrate immigrants and descendants for themselves with the color difference within the columns.

In the present study only residents who immigrated are included.

With the point of departure to investigate the largest groups of immigrants, only those were defined as the study population in addition to the total population.

The ranking for immigrants for 2007 is marked in light orange and in descending order comprise: Sweden, Denmark, Poland, Iraq, Pakistan, Somalia, Germany, Bosnia & Herzegovina, Iran, Vietnam, United Kingdom, Russia, Serbia, Turkey, and Sri Lanka. Decedents not included in the study are marked in brown.

2.THEORETICAL FOUNDATION

Why is the immigrant's access to the GP Scheme of concern? Equity in health care is the absence of systematic disparities in health. With the growing diversity in the Norwegian population focus must be set on the accessibility to health care services. The experiences some immigrants make with the primary health care services prove that health care systems rarely are designed for immigrant patients (Carballo & Mboup, 2005). Obstacles immigrants experience can be on one side lack of information, communication within the health care providers, or the patients' belief and diagnosis, or on the other side health personal prejudices, cultural stereotyping, or discrimination reasons for unsuccessful communication (Domenig D, 2004). By moving, immigrants are subject to a change in health care systems as well as a change of environment with specific health risks and behavior.

2.1 Health surveys including migrants in Norway

Comparing overall health is based on health outcomes by self-reports of general health and the prevalence rates for significant chronic conditions.

Compared to other integration variables, the information on migrant health in Norway is poor (Norwegian Ministry of Children, Equality and Social Inclusion, 2009). The health status of predominant immigrant populations (previously known as "first-generation immigrants") in Norway has not been well researched. One factor in this lack of research is lack of data, as inclusion criteria in public health surveys often miss newly arrived migrants.

2.1.1 Oslo Health Study (HUBRO) 2000-2001

HUBRO, a health profile, is a population-based, cross-sectional study including more than 18,000 residents in Oslo in the adult part of the study (Kumar, Grøtvedt, Meyer, Sjøgaard & Strand, 2008). Associations of health outcomes were investigated using multilevel logistic regression analysis. Factors included are self-rated health, mental health, coronary heart disease, chronic obstructive pulmonary disease, smoking, and physical activity. Migration nine years prior to the study is considered. Independent variables are gender, age, marital status, education, employment status, and income. The results give a comprehensive overview of the health status of Oslo residents. Results of the study show that migrants are younger than the ethnic Norwegian population (SSB) and differences in health between ethnic Norwegians and the immigrant population is strongly related to age. The results state that Oslo is one of the three counties with the lowest rate of heart attacks or strokes in Norway. Furthermore results show the impact of geographical differences within the districts of Oslo (Kumar, Grøtvedt, Meyer, Sjøgaard & Strand, 2008).

2.1.2 Oslo Immigrant Health Study (Innvandrer-HUBRO) 2002

For the first time a large number of immigrants participated in the HUBRO study. Even with 2900 immigrant respondents, the data made it difficult to study specific health problems in this population (Norwegian Institute of Public Health, 2009). With broad categories and 190 nationalities represented, reliable results were possible only for Oslo's five largest ethnic groups (as determined by country of birth), which was the study's focus. To gain a better understanding regarding certain health problems the survey focused on limited aspects. One of them, the psychological

distress was evaluated by Dalgard et al. (2006) showing that “the level of psychological distress is significantly higher in immigrants from low- and middle-income countries than in the Norwegian born and the immigrants from high-income countries.” They also report more powerlessness, more negative life events, less social support, less income, and less paid work. It is concluded that negative life events, mainly related to social network, somatic health, and economic situations, as well as lack of social support, are important mediators between immigration from low- and middle-income countries to Norway and psychological distress. Powerlessness also plays a role, but this is mainly because of a concept overlap between psychological distress and powerlessness. Another result by Lien (2008) showed that non-western immigrants are less satisfied than ethnic Norwegians with their last visit to a GP.

That migrants visit their GP more often than the general population (Innvandrer Helse 2005/2006, Blom, 2008; next page), and according to Kumar’s report from the Oslo Health Study, certain immigrant groups visit their GP up to three times more than the ethnic Norwegian population (Kumar et al., 2008). An analysis by Piro et al. (2007) based on data from the Oslo Health Study found, after an adjustment for individual socio-demographic variables, significant associations between area deprivation and all negative health outcomes, with these associations further weakly biased recent migration. The low response rate in both the Oslo Health Study and the Oslo Immigrant Study are often discussed. In a study by Selmer, Søgaaard, Bjertness & Telle (2003), two additional reminders were sent elevating the original attendance rate from 30% to 46%. Here the results showed that there was little impact on the socio demographic distribution leading to the conclusion that reminders only had minor effects on prevalence estimates and conclusion.

2.1.3 Innvandrernes helse 2005/2006 [Immigrant Health 2005/2006]

A report published by Statistics Norway (Blom, 2008) presents results from the third migrant interview survey conducted during the years 2005 and 2006, including both migrants from non-western countries and their Norwegian-born descendants (non-western immigrant populations). Results from the interview-based research were compared with the results from the entire Norwegian population based on the survey on living conditions for 2002 and 2005, after weighing gender and age. Participants were born in Bosnia-Herzegovina, Serbia-Montenegro, Turkey, Iraq, Iran, Pakistan, Vietnam, Sri Lanka, Somalia, and Chile and eligible after 2 years of residency in Norway. The results of the survey showed that the incidence of disease seemed to be similar in both native and immigrant populations. The perception of own health as being good or very good was found in 67% of the immigrant population but 86% among the rest of the population. By using the Hopkins Symptoms Checklist-5, a mental health screening instrument, 9% of the native population compared to 27% of immigrants showed symptoms of impaired mental health. The results showed that immigrants and their descendants visited the rGP 4.7 times in 12 months prior to the interview compared to 2.1 for the total population (Blom, 2008:p18). This national survey illuminating health care utilization includes only immigrants born in low- or middle-income countries. Information on immigrants born in high- or middle-income countries, are up to now not available. This might be under the widely accepted assumption that what appears alike behaves alike, in this context applying to “western” and especially “Scandinavian” immigrants.

2.2 Principles of equity in health care

“The term ‘inequity’ has a moral and ethical dimension. It refers to differences which are unnecessary and avoidable, but in addition are considered unfair and unjust” (Whitehead, 1992). In Norway health care equity is based on the principle to make health care accessible to every resident by promoting policies enhancing access to health care and at the same time aim to control the quality of care.

The *principles of equity* discussed by Mooney (1983), as equal access to health care, equal utilization of health care services and equal health outcomes form a framework within equity in health care. As access to health services consists of the entitlement to use health services, and the accessibility of those health services, it also includes how easy they can be located and how many obstacles the patient experiences. Utilization of health services is on the other hand linked to both socio-demographic factors like gender, age, and status (Adamson, Ben-Shlomo & Chaturvedi, 2003) and might depend on health systems accessibility and the individuals' health status (Andersen, 1995). Inequalities may be detected by an under- and over-use of a specific health system entry point while equal health outcomes are measured in mortality and morbidity measurements.

According to Scandinavian literature, unequal utilization patterns can be seen by the underutilization of patient list systems and overusing EWs for trifle conditions (Dyhr, Andersen & Engholm, 2007; Blom, 2008).

2.2.1 Equity and equality in health care

Based on Mooney's (1983) definition that equity in health care is defined by the equality of access, the equality of utilization, and the equality of health (outcomes), it is argued that health care service should be distributed according to need. Many factors combined affect individuals' health. Those factors may be referred to within the framework of "determinants of health and healthcare" developed by R.M.

Andersen (1995). Utilization in this thesis is based upon individual behavior and as a function to preposition to use services and the need for care. The utilization of the EW has been related as a predictor of inadequate access to the assigned GP.

Norwegian studies show that immigrants have a higher use of GPs than Norwegian-born individuals (Blom, 2008 and Aung et al, 2010); this provides a possible justification including unclear symptoms and poor communication leading to repeated visits. Also local EWs register higher utilization rates among migrants compared to Norwegian-born patients (Blom, 2008) while Hargreaves et al. (2006) showed in their study a lower utilization level among immigrants living in London.

2.3 Access to the health care

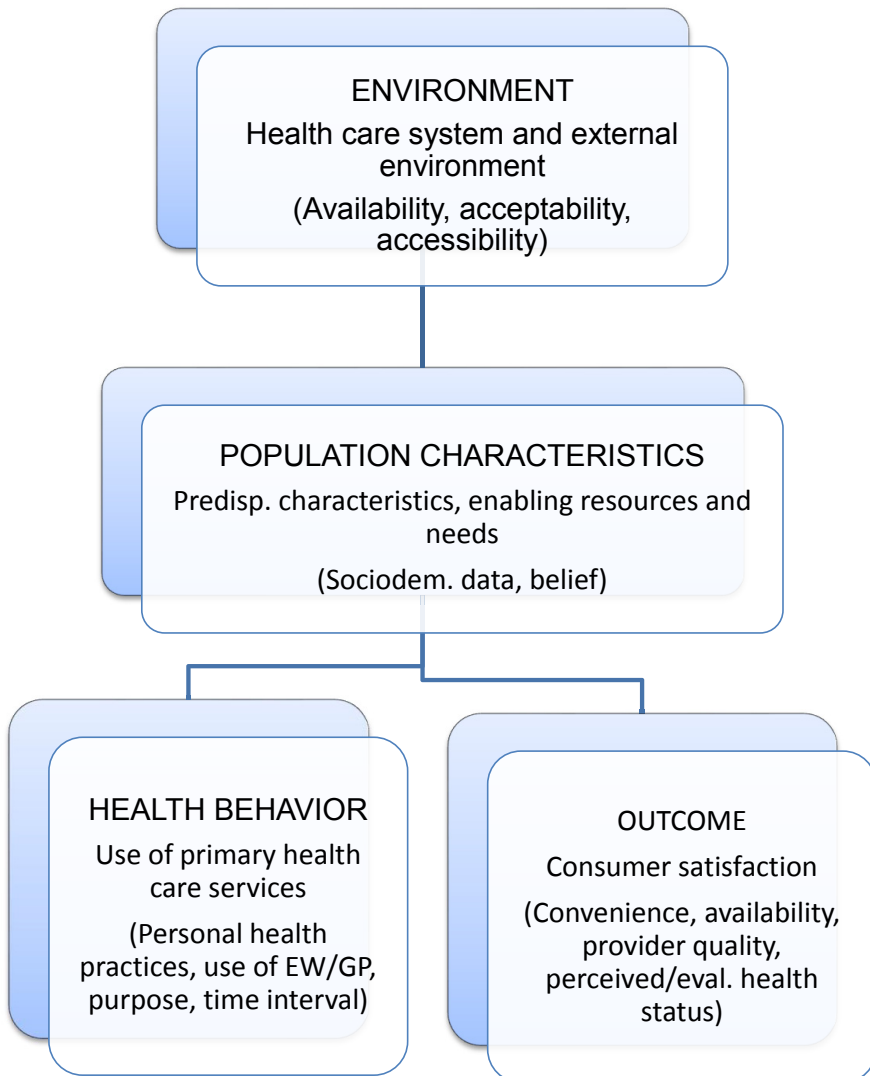
The right to access of health care was first reflected in WHO's constitution in 1946. In Norway today, equity to health care including the principle of equal accessibility the health care services anchored both in the National Health Plan for Norway (2007-2010) and in the Coordination Reform: "Proper treatment – at the right place and right time" (Norwegian Ministry of Health and Care Services, 2006; 2009).

The concept of equitable accessibility to provide appropriate health care service was designed for optimizing health to every resident in Norway, and described as

“providing the right service at the right time in the right place” (Rogers, Flowers & Pencheon, 1999). Kleinmann (1978) on the other hand defined accessibility as “the ability to identify the correct location in order to receive medical aid. By that differences in health-seeking behavior might be explained by the diverse beliefs relating to illness, treatment or cause of the illness.” Therefore, knowledge about the local health care system is necessary in order to obtain help from it, e.g., by being able to get an appointment with the rGP and by that not over-utilizing the emergency ward.

In this thesis, Andersen’s (1995) model is applied to describe the conceptual framework for accessibility in health care illustrating the impact of health status outcomes and portrays various influences when utilizing health care services and with that influencing the individual’s health status. As available services may be used depending on the individuals’ perception of needs, beliefs, attitudes, and previous experiences. Within the Andersen’s model, the health care system is depending on both the equity of availability and equity of accessibility of services and the acceptability of its content.

Figure 2: Conceptual framework for accessibility within the Health Care System
(Andersen R. 1995, p.8) – an adjusted version



As seen in figure 2 are the various influences on a given health service and the impact of the environment, population characteristics, and health behavior.

Lines within figure 2, between environment/population characteristics, health behavior and outcome, are seen as feedback loops demonstrating that outcomes are influenced by predisposing factors and the perceived need for services and the individuals' health behavior. Within the model effective or efficient access on the other hand might be measured. The impact in the use of health services with equitable access is shown by an improved health status or the improved satisfaction. Access dimensions in the model are exposed by potential access and realized access.

2.4 Synopsis of the theoretical framework

Table 1: An outline over the theoretical framework of the study.

| <i>Main research question</i> | <i>Research question based on pragmatism.</i> | |
|--|---|---|
| Underlying research question | Qualitative | Quantitative |
| Theoretical perspectives | Inductive logic / constructivist/post modern/grounded theory | Deductive logic |
| Design | Qualitative | Quantitative |
| Data | Narrative – purposive | Numeric – probability |
| Focus | Local contexts -background for the quantitative part. | Causality (theory) |
| Aim | To understand mental constructions – explanatory | To understand a part of reality – confirmatory |
| Methodology | Dialogistic/dialectic | Falsification |
| Analysis | Categorical and contextualizing | Statistical analysis |
| Analysis to answer the research question (mixed methods) | Pragmatism seeks criteria for truth and meaning in practical consequences. | |

Table 1, a synopsis over paradigms used in the thesis, is elucidated further in chapters 4, 5, and 6.

3 AIM OF THE PROJECT

The aim of the project is to examine the access for Norwegian immigrants to the General Practitioners Scheme.

3.1 Main research objectives

To investigate how GPs perceive the migrant patients' access to the GP Scheme.

(Sub-study I/paper I)

To investigate how key informants from dominating immigrant groups perceive migrants accessibility, acceptability, and availability to the GP Scheme.

(Sub-study II/paper II)

To investigate how migrants utilize the GP Scheme and the EW.

(Sub-study III/paper III)

3.2 Sub-research objectives

*Identify factors that contribute to migrant patients' equitable access to their rGP.

*Identify migrant patients' utilization and their satisfaction with the EW.

*Identify factors that contribute to migrants' participation in the GP Scheme.

*Propose measurements to improve information about the GP Scheme.

4. STUDY POPULATION AND METHOD

In this chapter both a summary of the study population (discussed in chapter 1.3) and methods used in the qualitative and quantitative part are mentioned for reasons of feasibility.

4.1. Background

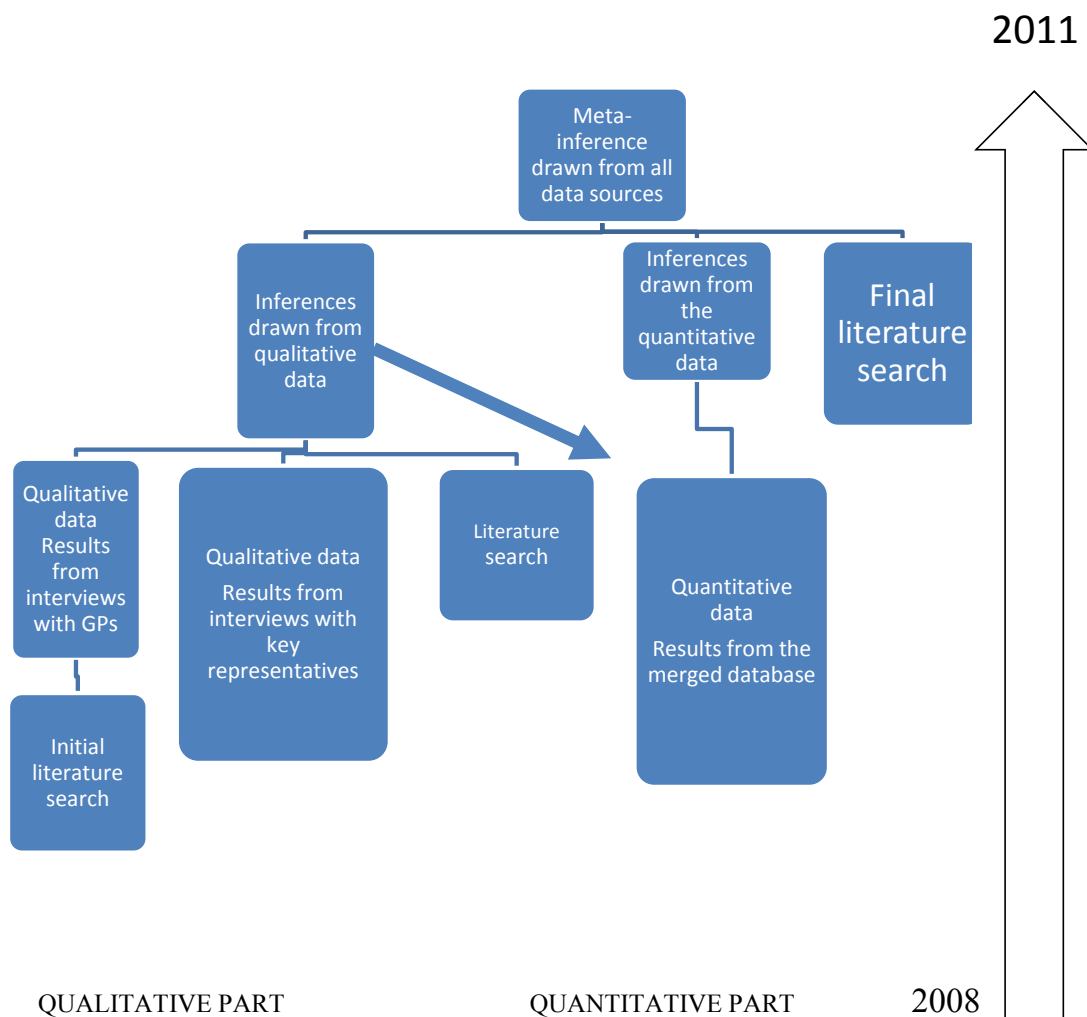
The impact of immigrants to Norway has changed dramatically over the last 30 years. Summing up chapter 1.3, in 2007 the largest groups of immigrants in descending order were people born in Sweden, Denmark, Poland, Iraq, Pakistan, Somalia, Germany, Bosnia & Herzegovina, Iran, Vietnam, United Kingdom, Russia, Serbia, Turkey, and Sri Lanka. As residents born in these countries differ both in their motivation to immigrate and in age, health literacy, empowerment skills, work environment, and gender, the need for health services cannot be measured alone by comparing them with the majority of the population. Their descendants on the other hand might have health care needs differing from the majority population but will not encounter formal and informal barriers to access by having an educational background from Norway. Here the access to the GP Scheme will be similar to the ethnic Norwegian population, expecting that the barriers to health care like in Adamson et al.'s study (2003) first occur at the second or third level of health care services.

4.2 Grounded theory and the mixed method design

With an inductive way for gaining knowledge, *Grounded Theory* was applied in the study. Grounded theory, “a specific methodology for the purpose of building theory from data” (Corbin and Strauss, 2008 p.1), is impending qualitative research methods by using a systematic set of procedures to develop an inductively developed theory about a phenomenon. With the aim to investigate for the diverse use of the GP Scheme, an open and investigative approach within the framework of grounded theory was chosen. Aiming to investigate the reality in the field we ought to develop assumptions including a hypothesis for the quantitative part.

Mixed methods, based on the complex interplay of factors in primary healthcare research (O’Cathain, Murphy & Nicholl, 2007), was chosen to illuminate the research question including qualitative and quantitative sub-studies exploring experienced inequalities and barriers to access within the GP Scheme between the ethnic Norwegian and the immigrant populations in Norway and shedding light on the causation to the common assumption that immigrants “in general” overuse the EW.

Figure 3: An overview over the sequential mixed method design used in the study.



As seen in figure 3, the pragmatic approach began with a qualitative inquiry leading to a hypothesis that was quantitatively tested, with final insights drawn from various data sources discussed in the meta-inference.

4.3 Literature search

A literature review not only aims to give an overview of literature but also triangulates the results of the semi-structured interviews in the qualitative part. For this reason literature search and main results are therefore placed in this section (a part of chapter 4: population and methods).

At the beginning of the project – both prior to and after the interviews – two different literature searches were conducted. While many articles were found by using the search strategy (enclosed in appendix, chapter 10.3) only the articles shedding light on the research question was enclosed in either one of the three articles and/or the thesis.

The development of the questions for the semi-structured interview guide was based on the results on previously published work including both qualitative and quantitative studies relating immigrants' access and barriers within patient list systems and the interaction with their GPs. After the interviews were analyzed, another specific literature search was performed focusing on themes and topics that emerged in the analysis. To avoid preconceived ideas biasing the interview process this literature search was performed after analyzing the results.

The two databases, Ovid Medline and PubMed, are versions of Medline with overlapping listings of original, published research. Using Ovid as the search system, I was able to also examine Embase, SveMed+, Cinahl, and PsycINFO.

The following electronic databases were used:

- Embase (via Ovid and covering public health, an important supplement to Medline) – with articles from 5000 mostly Western European journals are included

- Cinahl (covering health topics from over 2900 journals, dissertations, and conference reports)
- Medline/PubMed (overlapping with Embase), based on 5400 international (mostly American) journals
- SveMed+ (a Swedish database from the Karolinska Institute) registers 100 journals, mainly Scandinavian, published in one of the Scandinavian languages and discussing Scandinavian conditions
- PsycINFO (a specialized base for psychology, psychiatry, and related disciplines, often covered by Medline, Embase, and Cinahl)

The following keywords in combinations were used:

Cinahl: Medline (Ovid) – physicians, family practice, ethnic groups, refugees, emigration and immigration, transients and migrants, emigrants, and immigrants, minority health, minority group, access, Norway, Denmark, Netherland, Canada, Great Britain, Scandinavia; resulting in 278 articles.

SveMed+: Physicians, family, family practice, ethnic groups, refugees, emigration and immigration, emigrants and immigrants, transients and migrants, minority health, minority groups; resulting in 25 articles.

PsycINFO: Family medicine, racial and ethnic groups, minority groups, immigration, human migration or refugees; resulting in 74 articles. The earliest record included was 1950 at Medline, 1997 at Cinahl, 1977 at SveMed+, and 1987 at PsycINFO.

The initial search showed a result of 377 distinct papers meeting the keywords. They were read after being printed out or read electronically at the medical library at the University Hospital – Ullevål.

50 papers were retrieved initially for background knowledge; remaining studies were excluded on the basis of title or abstracts. Citation tracking was performed by

manually screening reference lists of eligible studies. Conference proceedings, research school notes, recommended literature, theses, and journal articles from reviewed and non-reviewed journals were included in illuminating the aim as described in chapter 3 of the thesis.

Inclusion of articles was English, German, Dutch, French, Norwegian, Danish, and Swedish. Additionally, personal communication with content experts in migration or system use was conducted. Over the course of the project, specific literature searches were performed to elucidate and to obtain comparisons on the result of each of the three articles. An additional specific literature search was performed on the topic of health literacy in January 2011. Before writing the main body of the thesis, an updated literature search was performed using the same search strategy and keywords using the timeframe 2009 – current date (April/May 2011). This search resulted in 53 new articles, some of them known from the article-specific searches; from this list, an additional 15 articles were included. For further illustration the search history is enclosed in the appendix, chapter 10.3. Furthermore, I searched www.ask.bibsys.no, the Bibsys Ask library base, the ForskPub base, and the ForskPro base for Norwegian-based research results that were not included in the international databases, resulting in 57 additional documents.

Results of the literature search not previously described (in chapter 2.1)

While a synopsis of the most central National Health surveys including immigrants is included in chapter 1.3, this section aims to give an overview of literature in general regarding immigrant access to patient list systems and the GP and the formal and informal barriers.

From the Oslo Immigrant Health Profile (Kumar et al., 2008) we know that the greatest proportions of those with frequent visits to the GP (≥ 4) were found in the group with less than 10 years of education. Another study concluded that patient levels of cultural integration did not appear to directly influence risk behaviors, but found basis to target patients working under stressful conditions, experiencing lack of family support, and having a low level of education (Bodenmann et al., 2010). A regression analysis based on 663 patients in the Netherlands (Harmsen et al., 2008) found that patients' language proficiency is the most important predictor for satisfaction, indicating the significance of communication when choosing medical aid.

Overcoming language barriers leading to an inaccurate diagnosis or inappropriate use of health services was described in Meuwesen et al. (2010). The study shows that it is noteworthy that not only the words need to be understood but also each other's expectations.

Trust to the local health system is another important element when seeking help. Lacking trust might delay the threshold to seek medical aid leading to an advanced stage of illness or in case of experiencing a medical emergency described in Manfellotto (2003). Stronks, Ravelli & Reijneveld (2001) showed that a lack of trust also could lead to individuals returning to their home country for treatment.

As mentioned previously, the Norwegian survey 2005-2006 (Blom, 2008) showed that frequency of consultations from ten migrant populations both to the GP and EW were significantly higher compared to the total population. Other aspects of migrants' utilization patterns are suggested by a Norwegian study by Moe & Bondevik (2008), which found that certain specific GP offices stood out for the high proportion of their

patients visiting the local EW, a pattern corroborated by Halvorsen, Meland & Bærheim, (2007). Halvorsen et al. found that having a well-organized GP office is the most important factor in reducing the use of the EW outside the GP's office hours. As European research shows, the lives of recently arrived migrants are on average quite different than those of native persons of the same age, gender, or family situation. Not least is the propensity of migrants to work in lower-skilled jobs unattractive for the native population (Carballo & Mboup, 2005). Earning a low annual income and having an unsecure job, they often work double shifts to make ends meet. From international studies we know that occupational accidents tend to be high among migrants (Carballo & Mboup, 2005), approximately two times higher according to the results of Bollini & Siem (1995).

The main task of the EW in Norway is to treat acute conditions, including acute flare-ups of chronic diseases. In Bergen, a city and municipality in the county of Hordaland, the results of a questionnaire-based investigation at the EW showed that the majority (approximately 75%) did not even try to contact their GP prior to arriving at the EW, but at the same time were willing to wait until the next day if an appointment at the GP could be secured (Steen & Hunskår, 2004). Moe & Bondevik (2008) found that unavailability of the GP and fast access to medical treatment, were decisive reasons for use of the EW instead of the GP. While 58% prefer the GP if available, only 38% believed that the assigned GP would be the best medical solution. Local and Scandinavian studies showed that patients did not limit EW visits to treatment of acute health problems (Christensen, Skafte-Holm, Weinicke, Greibe et al., 2005; Halvorsen et al., 2007). We know that immigrants originating from certain countries in Scandinavia do use specialist and emergency services more than the

rest of the population uses those services (Eike et al., 2010). These are results confirmed by Norredam et al. (2004) and Blom (2008). The results of the Danish study by Norredam showed higher utilization rates of the EW by persons born in Somalia, Turkey, and ex-Yugoslavia compared to the native population, while persons born in other Western and European countries showed a tendency towards less utilization (Norredam et al., 2004). That cultural factors influence migrants' use of emergency care is suggested by a Danish study (Dyhr, Andersen & Engholm, 2007; Andersen & Dyhr, 2006), which found that contact rates varied according to country of origin. Using EWs for routine care only allows symptomatic treatment without a follow-up, which is a problem that is compounded by the failure of some EW departments to share systematically information with the assigned GP.

A Norwegian study by Blom (2008) concludes that young individuals have a higher probability of seeking care at the EW compared with the middle-aged. On the other hand, results from a Swedish study including 52 participants concluded that demographic and migration-related factors were not related to self-reported health, symptoms, GP's understanding of their medical problems, language difficulties, and respect for personality and culture (Wiking et al., 2009). The lack of significance in those results might be due to the small sample size. Females showed a lower probability of emergency visits in the present study and this effect appears to be stronger in magnitude, as measured by the odds ratio. Blom's results (2008) could not confirm this effect within the age range 40-54. A Swedish study including a small number of respondents showed that women from Iran, Turkey, and Chile were over represented (Wiking et al., 2009). Qualitative research by O'Donnell et al. (2008) showed that GPs need to be aware that the patient's previous experience with

different healthcare systems can have an impact on the patient's expectation. If these experiences are not acknowledged and addressed, both lack of confidence and trust can undermine effectiveness during the consultation. On the other hand, a Spanish study by Buron, Cots, Garcia, Vall & Castells (2008) concludes that the overall utilization rate on the primary-care level was lower due to the "healthy migrant effect," valid for voluntary migration because population increase by immigrants in the hospitals catchment area did not correspond directly with an equivalent increase in emergency contacts, an effect that may diminish over time (Williams, 1993; Halli & Anchan, 2005). The discrepancy in utilization was also found in Norredam, Nielsen & Krasnik (2010). The results of the review suggest diverging utilization patterns between migrants and non-migrants in European literature. Before looking more closely at the results from the study the following should be taken in consideration.

Use of interpreters that facilitate patient-centered treatment are in line with national aims (Wiking, Saleh-Statinn, Johansson & Sundquist, 2009). Quill (1989) confirms that a mismatch in communication may lead to barriers in doctor patient communication.

Higher expectations could lead to greater use of the service (Mead & Roland, 2009). Evidence for this comes from a study (Grytten, Carlsen & Skau, 2009) on living conditions in Norway based on 1920 respondents and covering patient satisfaction. The study found that waiting time for a consultation was more important than length of the consultation or perception that the physician took their medical problems seriously. From this result it would appear that the relatively shorter duration of a GP

consultation (compared to one at the EW) is not a detriment to patient satisfaction (Sandvik & Hunskaar, 2010) so long as appointments can be taken care of relatively quickly.

4.4 Sub-study I (Paper I): A questionnaire survey with GPs in Oslo

The aim of sub-study I was to investigate how GPs perceive the migrant patients access to the GP Scheme.

Design: A questionnaire survey based on 12 semi-structured interviews with rGPs.

Population: By “snowballing,” a purposeful sampling strategy was used to locate information rich key informants (Patton, 2002:p237). By choosing rGPs, the snowball accumulated information rich cases. Aiming for purposeful richness in the data, both rGPs born outside Norway and inside Norway were included.

Seven male and five female rGPs were enrolled in the project.

The rGPs had between four and forty years working experience. Five rGPs regarded themselves as bicultural and bilingual. All rGPs enrolled are working in the catchment area for the project, Oslo.

Data collection: The interview guide for the semi-structured interviews listed questions that elucidate and illuminate the GPs’ opinion about migrants’ accessibility, equity and use of the GP Scheme (Kvale, 1996). With the standardized open-ended interview, the exact wording and sequence of questions were determined in advance. “The guide helped to make interviewing more systematic and comprehensive by delimiting in advance the issues to be explored” (Patton, 2002:p343). Primarily GPs were chosen by random covering different demographic variables such as age, gender, whether of native or foreign origin, length of experience and localization regarding share of migrant patients on their list. Due to a low response by random sampling, chain sampling (also known as snowball method) was chosen for the final interviews. Six informants filling the different demographic variables recommended those three GPs. Of those six, four participated. This “snowballed” (Patton,

2002:p237) further to four GPs. With reliance on colleague referrals, the information received is subject for bias while on the other hand, resulted in rich information, willing interview participants, and good examples by which to elucidate the research question.

Eleven interviews were conducted at the GPs' worksites and one other interview, at the responder's request, was conducted by telephone. By nine GPs the answers showed data saturation. Data saturation is here comparable to information redundancy (Patton, 2002). With the semi-structured interview guide we aimed to elucidate and illuminate the GPs' opinion about migrants' use of the GP Scheme. In a standardized open-ended interview, the exact wording and sequence of questions was determined in advance. "The guide helped to make interviewing more systematic and comprehensive by delimiting in advance the issues to be explored" (Patton, 2002:p343). No audio recording device was used. This decision was taken in order to ensure the richness of sensitive answers. Notes were taken during the entire interview as well as quoting of essential sentences or phrases. Instantly after each interview there was time for reflection regarding context and information given. When notes were taken, those were specified in brackets. After the last interview the information was grouped and coded. This coding was validated by a co-researcher (interviewer corroboration) by comparison. By coding and grouping, information was compared from previous interviews (Patton, 2002:pp462-477). Within the framework of grounded theory, the qualitative data collected for this project does not permit scientifically-based generalizations but aim to generate a theory that will be relevant to the overall research question developing a holistic picture on the accessibility for immigrants within the GP Scheme.

Employing the method “following a thread” (Ellis et al., 2006) by collecting purposive and narrative data and focusing on local contexts we aimed for the following:

- to shed light on the interaction between GPs and patients with an immigration background – collecting GPs’ experiences on the determinants for participation
- to gain knowledge about migrants’ experiences within the GP Scheme, focusing on the experiences and information from key informants acting as a cultural mediator

Analysis: Empirical data were collected in an inductive way (empirical grounding).

Pre-existing theories found within previous analysis were compared with data from the following interview (theoretical grounding). Internal grounding was achieved by congruence within elements of the theory found in the literature search aiming to find possible barriers for immigrants to access the GP Scheme. The applied approach aimed to capture and to describe central issues and themes. By that heterogeneity sampling, a sampling aiming maximum variation was applied (Patton, 2001, p. 234-235).

A content analysis was carried out by breaking the text into meaningful units, objective systematic coding to produce quantitative description of the material. By deriving coding strategies each unit of interview data was analyzed by intensity, direction, frequency and time (space), aiming to analyze by the exchange of logical arguments (dialectic), and by continuously being in a dialogue with relevant literature (dialogistic). Someone not present during the interview performed a secondary analysis.

Strengths and weaknesses

The rGPs hold a high grade of integration within the aim of the study having daily contact with migrants. By obtaining their view on barriers that immigrants encounter, the possible cause as well as their recommendations an in-depth understanding of the research question could be obtained. Still the limited number of participants does not allow the results to be generalized.

Following recommendation and in anticipation to gain sensitive rich data no audio device was used. The contextual details gained by that were to the expense of the validity of data, and therefore no generalization can be made.

4.5 Sub-study II (Paper II): A questionnaire survey with immigrant representatives

The aim of sub-study II was to investigate how key informants from dominating immigrant groups perceive migrants accessibility, acceptability, and availability to the GP Scheme.

Design: A questionnaire survey with 13 immigrant representatives

Population: With the aim to investigate various barriers immigrants experience when accessing the GP Scheme, key informants were used as sources of information. Key informants included in the study had developed in their role an understanding of the purpose and focus of the inquiry, issues, and questions (Patton, 2002:p321). Criteria for inclusion in the study were holding a leading position in a municipality supported migrant organization in Oslo, born in countries of Norway's predominant migrant populations, and the ability to converse in Norwegian. The point of departure was that we were neutral to migrants from countries geographically close to Norway and wanted to see how their utilization pattern differs. Therefore, key informants from all the major migrant groups were included and representatives born in Poland, Sweden, Germany, Iraq, Denmark, Somalia, Pakistan, Lithuania, Iran, Russia, Bosnia Herzegovina, Philippines, Vietnam, United Kingdom, and Thailand were included in the study. By having immigrated themselves and within the role providing support for their members to understand the structures and systems in Norway those leaders were given the role as cultural translators and were chosen purposely by criterion sampling (Patton, 2001, p.238). In Oslo – as in many other municipalities in Norway with a high share of immigrants – a council for immigrant organizations is established. The council in Oslo is in close relationship with established immigrant organizations in the

municipality. During a council meeting the most appropriate immigrant organizations and key persons (possible informants) were named. Migrant organizations from European countries did not collaborate with the municipality's immigrant council and I therefore contacted embassies for contact information. Key informants were perceived as sources of information and an ability to explain/translate I as an outsider could not experience myself (Patton, 2001, p.321). Informants chosen were knowledgeable about the topic and able to articulate in Norwegian about their knowledge expressing cultural information. Since informants in the project served as cultural mediators it was critical that they were well-integrated into Norwegian society, fluent in Norwegian, and familiar with the systems and values also of the native population (Bonder, Martin, & Miracle 2000; Patton, 2002:pp321-322). It is noteworthy to mention that the key informants from the 13 ethnic-minority backgrounds were not a homogenous group with respect to language abilities, educational background, or length of residence.

Data collection: Before preparing the questions, I looked at previous research in the field. After obtaining permission by SINTEF, I based the questions on a previous study in the field (Ådnanes, Hatling & Grut, 2005). Except for demographic questions, the questions in the partly open-ended questionnaire were tested before the interview (by individuals known by me privately) with seven migrants from various non-European countries. The interview guide for the semi-structured interviews listed questions that elucidate and illuminate the key informant's opinion about migrants' accessibility and use of the GP Scheme. The method used to gain data is similar to sub-study I. The standardized open-ended interview, the exact wording and sequence of questions were determined in advance. "The guide helped to make

interviewing more systematic and comprehensive by delimiting in advance the issues to be explored” (Patton, 2002:p343). I conducted the 13 interviews at sites and hours most convenient for the informants. Each interview lasted 60 to 90 minutes. Presupposition lead-in questions were often followed by dichotomous lead-in questions or follow-up questions. The interview was rounded up by a closing question providing an opportunity for the interviewee to have a final comment (Kvale, 1996:p87). By using semi-structured interviews, we investigated the diversity of limitations immigrants experience within the GP Scheme. We aimed for insights from knowledge generated from the interviews with information richness of the cases. Fearing a limitation on the richness of sensitive data, difficulties to get approval from the ethic committee and the risk of conceptually repetitive data (Glaser B, 1998, p.109) lead to the conclusion to abstain from an audio recording device. During the entire interview the interviewer remained neutral with regard to the content of what was said and writing it down promptly; statements were rendered exactly and written on the semi-structured questionnaire (field note). Illustrative quotations were placed within quotation marks. After the first verbatim note taking a member check (verification by the interviewed) was performed to control for potential bias and to assess the consistency of the information obtained from informants (Patton, 2002:p381). In a post-partum reflection, immediately after each interview to avoid recall bias, additional contexts or thoughts were marked in brackets. All interviews were conducted at the interviewees preferred site.

Analysis

The analysis was seen as “a process of examining and interpreting data in order to elicit meaning, gain understanding, and develop empirical knowledge” (Corbin &

Strauss, 2008: p1). Empirical data was collected in an inductive way (empirical grounding) and thereafter coded and grouped. Pre-existing theories found within the previous analysis were compared with data from the following interview (theoretical grounding). Internal grounding (by topic with the emerging theory) was achieved by congruence within elements of the theory found in the literature search aiming to find possible obstacles for immigrants to access the GP Scheme. The applied approach aimed to capture and to describe central issues and themes, heterogeneity sampling – the sampling of maximum variation was applied (Patton, 2001, p. 234-235). Both in sub-study I and sub-study II, a content analysis was carried out by breaking the text into meaningful units, objective systematic coding to produce quantitative description of the material. By deriving coding strategies each unit of interview data was analyzed by aiming to analyze by the exchange of logical arguments (dialectic) and by continuously being in a dialogue with relevant literature (dialogistic). With the focus to find conceptual categories in the data and thereafter looked at relationship between the categories and core information. An additional analysis was performed by and discussed with someone not present during the interview.

Strengths and weaknesses

Key informants with a high grade of integration have a role in the community as bridge builder between the migrant organization and the majority population. Without that key informant relationship, important information would not be found about the kinds of experiences migrants have especially when they are new in the country. Interviewing across a cultural divide means additional risk for

miscommunication (Patton, 2002:p391). By using key informants integrated into Norway with the ability to speak Norwegian helped to reduce the vulnerability to misinterpretations and miscommunications. We considered the words spoken in the interview as data. We took into consideration that those words may have different meanings in other cultures and probed to assure the correct understanding if necessary. Within content analysis subject cofounding can be reduced and longitude based data illuminates actual behavior we sought for. Analyzed data within the content analysis were subject to triangulation.

A weakness of the study is the “danger of cultivating and using key informants by relying too much and losing sight of the fact that their perspectives are necessarily limited, selective, and biased” (Patton, 2002:p321). Therefore information is specified as such in the article, as key informants’ capabilities for verbally expressing cultural information represented only perceptions not truths and no control of a bias from this “secondary view.” By focusing on information richness of the cases and diverse data and not on transferability only answers from one representative from each country were included, leading to a weakness in data validity. Another weakness of the study is that no audio device was used. The decision to restrain from audio devices is based on thorough recommendation by migrant representatives stressing the possibility on limiting the expression of sensitive information. By doing so also the presence of unanalyzed or conceptually repetitive data was limited (Glaser B, 1998, p.109). Although, without an additional researcher present, without recording the interviews and the possibility to transcribe all data, the validity of data is limited.

4.6 Sub-study III (Paper III): A retrospective register based cohort study in Oslo

The aim of sub-study III is to investigate how migrants utilize the GP Scheme and The EW.

Design: A retrospective register based cohort study

Population: The population in the original dataset is based on two independent public registries: the official National Population Registry and the consultation database basis for reimbursement (NAV), including data for all 430 Norwegian municipalities. Data included consultations at the EW or the GP during the years 2006 and 2007. The data set chosen for the study population describes 279,531 individuals (unique residents of Oslo) and their 1,775,845 consultations. Individuals who did not contact their GP in this time period are not included in the project.

Oslo, a densely populated metropolitan area, gives more precise information about accessibility in the Norwegian health system. Accessibility varies a great deal between urban and different remote areas. As well, immigrants mostly live in the cities of Oslo, Drammen, and Bergen. To ensure homogeneity in the organizational structure of the primary sector, only residents of Oslo over the age of 18 were included in the analysis. The age limit reflects the assumption that residents under age 18 are more subject to their parents' choice when seeking medical help.

Data collection:

The register data, with demographic data for all inhabitants from the National Population register, were merged with routinely collected records from Consultation Register records at NAV.

Data originating from the National Population register included the following:

- Personal ID number used as a stringing ID followed by age, gender, country of birth, time of migration to Norway, and municipality of residence

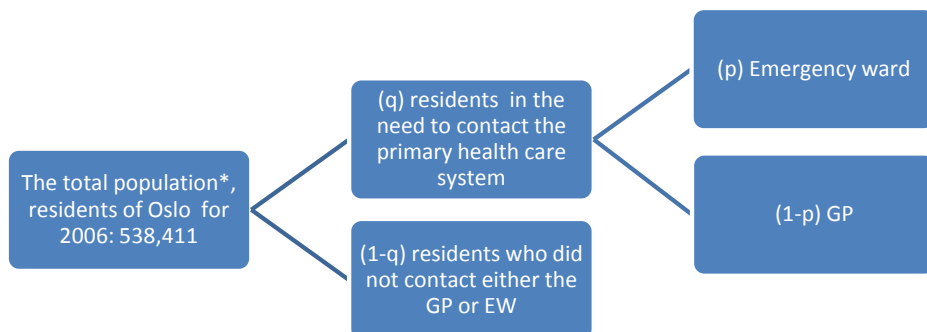
Data originating from the Consultation register representing basis for reimbursement:

- Personal number used as stringing ID followed by the amount of visits at GP or EW and time of visit

Database: Both databases became strung by the personal ID number at Statistics Norway. After the merge the data was de-identified by Statistics Norway and given a serial number and distributed as a file with serial number codes discriminating among 478,087 inhabitants of Oslo and follows each individual's interaction with the primary health system over the duration covered. The dataset encompasses 1,934,248 observations, 279,531 individuals, and 92,295 unique immigrants using the primary health sector. Since the data file includes repeated observations of each individual, we are able to account for individual specific unobservable heterogeneity related to the choice between consulting a GP or an EW.

Based on the Fraud report (WHO, 2010), it might be assumed that 7% of health care reimbursement and its registration is incorrect. Those results show that losses to health care registration errors seriously undermine the quality and extent of primary health care, which can be provided (WHO, 2010) and at the same time that the results up to 7.3% might be incorrect.

Figure 4: Study population and probability (p) analyzed in Paper III.



*Reference to the total population of Oslo in 2006: Statistisk sentralbyrå, 2011a including also residents under the age of 18.

As illustrated in figure 4, the population analyzed in paper III, is divided regarding the probability (p) to contact the EW or the rGP (1-p) when experiencing an acute but not life threatening medical situation.

Analysis: Sub-study III was performed using the statistical package STATA 11. A model assessed by logistic regression analyzed the probability of seeking emergency care for residents with or without a migration background and estimated the impact of time since immigration by showing the “association between binary outcomes and explanatory variables in terms of odds ratio (OR)” (Kirkewood & Sterne, 2009:p190). A 95% confidence interval was used for prediction of the probability of an incidence. Data of this incidence – contacting the EW – was fitted to a logit function curve.

Log odds of outcome = $\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots \beta_p x_p$ where the β 's are the regression coefficients associated with the explanatory variables. Building a model with categorical-exposure variables studies the effect on each of the baseline groups by

comparing the different OR coming from the comparison between the baseline and the non-baseline group. The P-values for the indicator variables used in the model are used to test the hypothesis.

The database is a collection of multivariate and correlated data, where different variables correspond to repeated measurements over time with an outcome having an unknown dependence structure. Those data are analyzed by subject-specific parameters, also called random-effect latent variables, and incorporated in hierarchical models. By accounting for unobservable heterogeneity at the level of the individual by estimating two random-effects logistic regressions addressing our two hypotheses we distinguished among immigrants belonging to the 14 largest migrant populations, other migrants, and residents born in Norway by trying to predict emergency ward usage as a function of several factors (e.g., immigrant status, age, gender).

The two models in sub-study III are based on the following hypotheses:

- Heterogeneity hypothesis: Assuming that immigrants differ in their propensity to visit the EW compared to the rest of the population (tested in model one)
- Duration-of-residence hypothesis: Assuming that the probability of EW visits among immigrants is influenced by duration of residence in the country (tested in model two)

As use of primary health care services is highly correlated with an individual's probability of experiencing a medical emergency, behavior seen in this situation might be a result of the experience of informal barriers and previous experience within accessibility within the GP Scheme. Both model tests therefore are immigrants' probability of visiting the EW.

MODEL 1

Based on 279,531 individuals counting for 1,934,248 observations, a multi-regression model was constructed. The average number of observations per immigrant born outside Norway by 2 non-Norwegian parents was 4.7 and 4.2 by patients without immigrant background. Explanatory variables chosen were age, gender, and migration background as defined by Statistics Norway. The model allowed us to see if immigrants with non-Norwegian-born parents have the same probability of seeking care at the EW as individuals without immigration background. The regression model estimated the impact of age after grouping subjects into 14 categories covering ages <25 to 90 or older. Odds Ratio (OR) and a 95% confidence interval (CI) were established for all the explanatory variables.

The model investigated whether the probability of usage is greater with immigrant versus native status, and whether it's greater the less time people have been in the country. Each person in the data set can have one or several records, one for each visit to a GP or the EW. Since there are repeated observations for persons, with the number of observations varying from one subject to the next (i.e., an unbalanced design), a random-effects logistic regression was used to test each hypothesis.

MODEL II

Model II tests the research question if the probability of visiting an EW and not the rGP is influenced by the duration of residence in the country. The model is estimated by means of random-effects logistic regression. Since duration of residence is only

defined for individuals with immigrant background, only such individuals are included in this regression analysis.

Estimation of the variables “duration of residence” and “country of birth” among immigrants on the probability of seeking care at the emergency ward is based on 387,927 observations of 51,771 individuals with an average of 7.5 observations per individual. The model explores how duration of residence impacts the use of the EW differently depending on migrants' gender and birth country.

By also including the square value of duration of residence, $Residence^2$, the model also tests whether a marginal increase in time since migration influences the probability of an emergency visit differently when the time since migration is short compared to when it is long. To illustrate some key findings with regard to migrants' duration of residence, the probability of an EW visit for a migrant female, age 45, with two primary-care consultations per year was compared with that of a native Norwegian of the same characteristics, and we graphed the change in probability of an EW visit as a function of duration of residence (for the migrant) as that increased. Predicted probabilities for migrants from Russia, Denmark, Iran, and Somalia are not included because the effect of duration of residence was statistically not significant.

Strengths and weaknesses: Only data from residents who contacted a GP or EW are included in the study. The data accounts for only 70% of the population in Oslo. Our data include only residents over the age of 19, accounting for approximately 24% of the population. A variable not available and therefore not included in the analysis of the present study is education. From the Oslo Immigrant Health Profile (Kumar et al., 2008) we know that the greatest proportions of those with frequent visits to the GP (≥ 4) were found in the group with less than 10 years of education.

4.7 Triangulation

Data triangulation performed in this thesis on various levels refers to using several data sources to improve the validity of research (Patton, 2000:p247). Triangulation is a technique to validate data. With the aim to facilitate concurrent questions with a confirmatory and exploratory design, mixed-methods (Teddlie & Tashakkori, 2009:p33) were chosen to generate and verify an emerging theory within the same project.

In the absence of transcription during the first interview in sub-study I and II, interview notes were verified by *member check* subsequently to the actual interview. This informant feedback was used as respondent validation to ensure accuracy of data in order to strengthen external validity. *Data triangulation* involves “the use of variety of data sources in a study” (Teddlie & Tashakkori, 2009:p75) and was pursued by combining data from sub-study I, II, and III.

Methods triangulation and triangulation of sources (Patton, 2002) was performed by using two different qualitative research methods (literature study and interviews) as well as the person triangulation by collecting data from both GPs and representatives aiming to give a holistic picture and a better understanding of the phenomena.

Investigator triangulation involves different researchers in a single study (Teddlie & Tashakkori, 2000:p75) and was accomplished by comparison of analysis data with

a co-researcher. Triangulation of data between the methods focused on the inference quality and transferability, with the aim of strengthening validity and balance between the ideal and the practice. The findings lead to conflicting results, but enhanced the overall quality of the evidence base (Mofatt et al., 2006).

Methodological triangulation involves “using multiple methods to study a single problem” (Teddle & Tashakkori, 2009:p75) and was performed by combining both qualitative and quantitative methods in investigating the research question. Triangulation between methods and a focus on inference quality and transferability served to strengthen the validity of the results and find balance between the ideal and the practice (Teddle & Tashakkori, 2009:p75). Results from the purposive collection of data were analyzed categorically and by contextualizing. An integration of the qualitative results by conversion was used to develop the hypothesis used, which was then tested in the quantitative part of the project.

4.8 Limitations and validity

The qualitative part of the project tried to illuminate “why” and “how” migrants use the GP Scheme. The quantitative part of the project tried to illuminate “who” gains contact with which service provider and how often. Each part was subject to certain limitations, affecting the totality of the analysis. Given the focus on the Oslo municipality in both parts, it is not clear how representative the findings will be outside that geographical context. Additionally, information being sought was specifically on the migrant’s use of the GP Scheme, and therefore a bias may have existed to find positive data about this issue.

Limitation regarding included population in the qualitative part:

The study population of GPs or migrant representatives was not randomly sampled which may have introduced bias. The purposeful sampling strategies used in the qualitative part assured information-rich cases (in terms of depth and detail) geared toward illuminating important views rather than generalizing from a sample to a population; such purposive sampling runs the risk of introducing bias.

Limitations regarding accuracy in gathering qualitative data:

No electronic recording equipment was used both due to the strong concerns of the ethics committee regarding vulnerable groups, and also from concern recording would reduce the participants' willingness to speak frankly (ref. chapter 4.2 and 4.3).

Limitations regarding surveys of ethnic minority groups:

Another limitation was our reliance on census data, which reflects a demographic snapshot at a certain time, and whose pre-set categories sometimes introduce ambiguities (Chaturvedi & McKeigue, 1994). This was especially so for migrants born in Turkey, which census data could not be differentiated between, for instance, ethnically Turkish labour migrants and Kurdish refugees. Motives for migration, broadly differing as in these two groups, may have an impact on health behavior and general health outcomes, as described in Carballo & Nerukar (2001).

Bias in techniques of the investigation:

Because I am the instrument (i.e., the interviewing researcher) in the qualitative inquiry and the project as a whole, I hereby include some personal information as

follows: I am a female immigrant who has extensively worked with migrants both in and outside Norway in different settings, both as a frontline health worker (in the EW and in pre-hospital services) and in management positions. My varied background underscores for me both that “truths are relative and multiple and subject to redefinition” (Charmaz, 2004:p983), and that it is possible to tease out of people’s perceptions and analysis of data claims that are valid and credible.

To register an interview recoding by tape, video, note writing and recall might be used (Kvale,2001:p101). Guidelines used in Norway are best suited for the population in Northern Europe and North America, while other cultures have other rules (Kvale2001:p75). Not using an audio registering device limits the accuracy of every answer that can be recorded. With that in mind and the aim to tease out sensitive perceptions, answers were not recorded by audio devices.

Furthermore the interviews were undertaken in Norwegian. After the interviews, I was able to translate my notes (the answers), which in turn became the data for this study.

Internal validity:

Internal validity in the *qualitative inquiry* is described as truthfulness with respect to representation of the participant (Holloway, 2005:p277) and refers to the confidence that the study design, conduct, and analysis has minimized or avoided biases (Bornhöft et al., 2006).

Key informants were interviewed with the purpose of eliciting from them rich anecdotal and experiential material together with causal elucidation. To improve accuracy and internal validity, before starting the interviews with key informants I verified the answers with the person I interviewed (respondent validity). One

respondent was a key informant herself, but not from one of the dominant immigrant populations, but from an immigrant organization for Latin American immigrants in Oslo.

Selection biases present because neither the key informants nor the GPs included in the project were randomly chosen. *Information bias* refers to the possibility of systematic errors in the accounts obtained from informants. In the case of migrant representatives interviewed, information obtained for migrants from an entire country were fully dependent on the perspective and answers of a single individual.

Internal validity in the *quantitative inquiry* can be described as the validity of inferences pertaining to the study subjects in the source population. The consultation data received for the 2-year period only included residents having contact with the primary health care system during this time, and results cannot be presumed to extend beyond this group. By not being able to account for all citizens in this time period we only could estimate the probability of choosing the EW when choosing between the two service providers (EW and GP).

External validity:

External validity is the “extent to which the researcher’s findings reflect the purpose of the project and represent reality and demonstrate integrity and quality” (Holloway, 2005:p296).

External validity in the *qualitative inquiry* focused on generalizability, so results can be shown as valid beyond a single study (Holloway, 2005:p278).

Information bias refers to systematic errors in the information acquired from the GPs or key informants. Systematic errors might be caused by errors or distortions made as I extracted information during the interview, or by incomparable ways study

participants expressed their information, or by recall bias.

Methodological factors can also introduce distortions in the results of studies about health-related behavior, factors such as questionnaire design, choice of interviewer, and cultural differences in expressing responses (Reijneveld, 2000). Cultural differences within a single country might be immense and the responses of a single key informant for each country are very likely not generalizable. To enhance the external validity of the project so as to improve accuracy, credibility, and transferability, I performed a thorough member check. The member check (Yanow & Schwartz-Shea, 2006; Teddlie & Tashakkori, 2009:p213) following the post-partum reflection was performed with another researcher who assisted me in verifying details.

Researcher bias 1: Being a migrant and interviewing migrants (key informants), I also belong to the study population. Being a migrant with an emic viewpoint (Onwuegbuzie & Johnson, 2006) possibly could lead to bias.

Researcher bias 2: Only one researcher (me) was present during the interviews, a possible contribution on biasing the results.

With the use of register data for two full years based on reimbursement, sufficient data was received to make a valid generalization for Oslo. Therefore the external validity is not threatened.

Validity in mixed methods:

Meta inference “is a conclusion generated by integrating the inferences obtained from the qualitative (QUAL) and the quantitative (QUAN) strands of a Mixed Methods

(MM) study” (Teddle & Tashakkori, 2009:p338).

Sample integration was performed in the meta-inference. During the qualitative part I had an insider view, while during the quantitative part I primarily had an outsider view. I tried to compensate for the possible weakness in the qualitative part of the study from selection bias by including the full set of consultations in Oslo for two years in the quantitative part. The qualitative part of the study led to the knowledge that helped construct the hypotheses tested in the quantitative part. In this sequence the understanding of the mental construction was explanatory followed by the aim to understand a confirmatory part of reality (Onwuegbuzie & Johnson, 2006). During the meta-inference, both sets of results informed and enriched each other. Using a pragmatic approach entailed starting with practical problems (experienced both in Norway and reflecting international realities) as a springboard for a search for meaning and truth.

5. RESULTS

As results of the three sub-studies are stipulated in the three publications part of the thesis, chapter 5 is serving as a synopsis of those results.

5.1 Sub-study I (published in Paper I)

Title: *The intercultural challenges of general practitioners in Norway with migrant patients*

The interviews showed that GPs defined migrants in terms of socio-cultural difference rather than legal status, with these differences often obstructing doctor-patient communication and understanding. Interviewed GPs reported that migrants often are helpless in dealing with the public-health service owing to language difficulties, differences in expectations, and a systemic failure to coordinate care. Furthermore GPs mentioned that they as gatekeepers to the secondary care and key personnel within the GP Scheme did not receive information about their own patients when treated at the EW; a praxis that is not shared by all EWs. Additionally, GPs informed that migrant patients might favor the use of the EW. The findings of sub-study I suggest that migrants might neither receive or comprehend information about the GP Scheme and underscore the importance of providing information about health services, including the GP Scheme, in a migrant's mother tongue upon arrival in Norway.

5.2 Sub-study II (published in Paper II)

Title: Migrant participation in Norwegian health care: A qualitative study using key informants

Key informants from the 13 largest populations of immigrants illuminated the research question by repeating information given by members of their organisation and their own opinions. The semi-structured interviews in 2008 and 2009 indicated that integration into the rGP Scheme and adequacy of patient-physician communication varies according to the duration of time in Norway. Furthermore, the results indicate the patient's country of origin, the reason for migration, the level of health literacy, intention to establish permanent residence in Norway, and language proficiency in the local language all have an impact.

Other obstacles mentioned are lack of information, doctor-patient interaction patterns, and conflicting ideas about the role of the doctor along with language and cultural differences. Information about the GP Scheme and the individual assigned GP is distributed by mail in Norwegian to the registered address approximately six weeks after arrival to Norway. Representatives expressed concern about the capacity to understand the information initially received upon arrival in Norway from the authorities. Furthermore it was questioned if the migrant, when moving to another location immediately updates the address given by arrival in Norway. Institutional barriers found are lack of cultural understanding, experienced limitation in the accessibility and unsuccessfully distributed information. The results show a considerable agreement about barriers for immigrants for both rGPs born in and outside Norway.

A possible strategy to reduce migrants' obstacles to receiving health care would be to combine direct intervention by migrant associations with indirect intervention of the public health system. A considerable agreement about major issues influencing the accessibility and equity of primary health care services existed among the interviewed key representatives. Information gained from the interviews was interpreted and led to models that were tested in the subsequent quantitative study.

5.3 Sub-study III (submitted in Paper III)

Title: Use of primary care emergency services in Norway: Impact of birth country and duration of residence

In this article, information from paper I and paper II were used to find why the compliance with the GP Scheme, which has been generally high, has proven lower among Norway's increasingly diverse immigrant population.

The descriptive results also show that the gender ratio varies from 78.4% female immigrants born in Russia and down to 40% females within the group of immigrants born in the United Kingdom. When needing medical care women in the various subgroups had the lowest probability to decide for the EW, when choosing between a GP or the EW.

The results show that immigrants cannot be considered a monolithic class with respect to their use of EW. The results confirm furthermore that all of the 14 immigrant populations show a higher probability, compared to native-born Norwegians, of choosing medical aid at an EW instead of the rGP during the primary years after migration. Residents born in Norway's neighbor countries, Sweden and Denmark, have different utilization patterns with almost 50% of a higher proportion

among residents born in Sweden rather than in Denmark. This might be explained by the different times of residence (Denmark:21.6 years and Sweden:10 years).

Residents born in the United Kingdom had an average of over 10 years of residence in Norway. The average number of yearly visits within the GP Scheme varied from 5.7 visits found in the group of immigrants born in Pakistan to 3.6 visits found in the group of immigrants born in Sweden.

Iraq and Russia with the duration of residence of less than 8 years have a high proportion of emergency visits.

Over the time of 17 years after immigration, the propensity to visit the EW less than the average native population was seen in residents born in the United Kingdom and Germany followed by Sweden, Vietnam, and Bosnia. In accordance with other studies the average proportion of EW visits is lower for residents born in Norway to Norwegian parents. None-the-less, a significant reduction in the propensity over time was seen in residents from Poland, Iraq, Pakistan, Turkey, and Sri Lanka. The results from the sub-studies also showed significant variation among individuals within different migrant groups in respect to sex, age, and duration of residence.

6. DISCUSSION

The discussion, an inferential analysis is based on integrated results and inferences from papers I, II, and III along with the result of the literature search and discussed within principles of equity in health care. With the aim to identify key potential barriers for adequate treatment and visualizing barriers of accessibility within the GP Scheme, the meta inference of the main results of the study will be discussed within the following:

- How do immigrants access and use the GP Scheme?
- Which barriers are immigrants facing within the GP Scheme?
- Which factors might contribute to migrants participation in the GP Scheme?

6.1 How do immigrants access and use the GP Scheme?

As the GP Scheme aims to organize primary health care with the aims of ensuring continuity and coordination of care, equalizing access across the population and encouraging efficient use of resources by limiting inappropriate use of secondary care takes place. As results in sub-study I and II indicate, the ability to obtain a medical consultation without the need of arranging an appointment in an unfamiliar language is what many immigrants prefer with the EW as a service provider. This service is available on demand, in between jobs, or after the second shift. As our results show the contact rate at the EW rapidly increases after hours, peaking between 21.30 and 6.30 (see chapter 5.3), leading to the assumption that immigrants are contacting the EW because of its availability and therefore have more EW contacts that best could be treated by the GP. Similar results are seen in a Scandinavian study conducted by Norredam, Mygind, Nielsen, Bagger & Krasnik, (2007).

By including the dominating group of immigrants from both western and non-western countries, migrants from countries geographically close to Norway were also included. The unexpected results showed that the adaption process and health seeking behavior does not fit the generally assumed expectation that migrants from geographically close countries will habitually have similar health seeking behavior than residents born in Norway.

Exposed to poor working and living conditions, newly arrived migrants may experience limited access to health care for administrative and cultural reasons. To show the full magnitude of the problem, the following should be taken into consideration: Newly arrived immigrants, often persons during the fertile period of their lives, are challenged to establish a new life, a costly process in terms of both time and money. While most inhabitants facing a major life challenge might get help from family and friends, newly arrived migrants often are struggling without this aid.

As sub-study III observes, immigrants with non-Norwegian born parents have a statistically higher probability of seeking care at the EW, compared to individuals without an immigration background, a result confirmed by a study by Statistics Norway (Blom, 2008). The results from the sub-studies indicate further that utilization patterns were mainly influenced by the duration of residence and the country of origin and confirms previous reports of high probability of EW visits among young adults and the elderly while individuals in their 60s have the lowest probability of emergency visits. A linear trend between impact of age and satisfaction level with the consultation is found in a Dutch study (Harmsen, Bernsen, Bruijnzeels & Meeuwesen, 2008).

Results in sub-study I and II on the other hand indicate a low symptomatic threshold for small symptoms, motivated by a desire for immediate medical attention, and reflects impatience for waiting for an appointment. Other reasons for extended use of the EW were language barriers, poor patient-doctor relationship, and low levels of health literacy. Since its implementation, legal residents of Norway are automatically enlisted in the Scheme and assigned to a GP. The national assignment coverage in 2007 was 98.5% (Nossen, 2008). The assignment coverage was based on the registration of previous administrative decisions. Moe & Bondevik (2008) found that seven years after the introduction of the GP Scheme, 95% of patients knew about the Scheme's details or to which GP they actually are enrolled. The results in this study came from a town in the south of Norway with a catchment area lacking a high density of immigrants. Some years earlier, a study by Steen & Hunskaar (2004) showed that 84% of patients could name their assigned GP. A high GP registration rate and a low rate of utilizing GP services have also been found (Aung et al., 2010). Our results indicate that migrants might not be aware of the Scheme and its implication during the first years of their residence, and that to a much lower extent than indicated by Nossen (2008) and Moe & Bondevik (2008).

As results of sub-study III show, migrants' utilization with the GP Scheme varied considerably according to the migrant group. Migrants from countries geographically close to Norway showed more contentment with the Scheme, except for what they said were long waiting periods for appointments. This may seem consistent with a common opinion, namely that migrants from neighboring countries will show similar utilization patterns as the indigenous population. It is therefore an interesting finding

that individuals from Norway's neighbor country Sweden show a distinctly different utilization pattern by a high contact rate of the EW.

The diverse probabilities to experience an emergency visit as shown in sub-study III indicate the importance that the impact of healthcare reforms such as the GP Scheme are not always foreseeable. As Cramton et al. (2007) states the probability shown in annual exposure to primary medical care can be used as a direct measure of utilization as well as an indicator of access. Results of sub-study III show that variations across population segments are potentially highlighting organizational, physical, and cultural barriers. Similar results might be found in Cramton et al. (2007).

Access

"The nurse gives no appointment upon arrival...She always advises to use the EW"
(Migrant representative from Pakistan).

Within the GP Scheme, the GP is expected to be the gatekeeper to secondary health care. Regarding gate keeping, sub-study I and II showed contradicting results. While GPs ensured for the possibility for emergency appointments during the day of contact, migrant representatives did not share the same understanding. Our results show further that patients are getting referred from the administrative staff to an EW or that patients face automatic telephone services (in Norwegian) and busy lines when initializing contact in situations of need. This is experienced as a totally different kind of gate keeping. There was also a discrepancy regarding the possibility for emergency appointments at the GP. Migrant patients were experiencing long wait times to reach an appointment.

"The phone is always busy. And if you are lucky you get the possibility to an appointment in 2 weeks time"

(Migrant representative from Russia).

Similar to findings in a Swedish study (Wiking et al., 2009), there was a tendency to express a lower degree of satisfaction when the wait was more than two weeks between booking the consultation and seeing the GP – results also seen in the general Norwegian population (Godager & Iversen, 2010).

Overuse and underuse

"Many problems occur because of alcohol use but instead of treatment here the specialist gets contacted at home. The EW is only contacted in case of injuries"

(Migrant representative from Poland).

As utilization patterns of health services depend on the individuals' health behavior and population characteristics (Andersen, 1995), we assume that they also vary within the various groups of immigrants in Norway. Sub-study I, II, and III indicate a different frequency of the primary health care use (GP and EW) and a different probability to visit the emergency ward among migrants compared with non-migrants, even though there are differences due to country of birth, age, and gender. In a national study the consultation frequency of migrant women in interview-based studies seems to be different, higher compared with the rest of the population (Blom, 2008). The rationale for that is not clear, but might be related to the possibility that when asked for consultation frequency the amount of visits triggered by one's children are included in the amount reported. As health needs differ among various groups of migrants, and as health needs are not observable, it is not possible to

evaluate the appropriate use and leading to an estimate for overuse or underuse. A decrease in the probability of choosing the EW rather than the rGP might lead to the assumption that the level of critical health literacy (Nutbeam, 2000) is positively related with residence, leading to the assumption that migrants will benefit from information and accelerate the adaption time seen in model II in sub-study III. From literature we see that patients accessing mental health care within the primary health care system are associated with service overuse, even while there are reasons to believe that psychological stress might lead to underuse (Berg & Johnsen, 2004). Kirkmayer et al. (2007) concluded that cultural and linguistic barriers contribute to a lower use of mental health services (secondary care). In the case of migrants, the results of the qualitative part indicate that mental health related problems, found especially in those who are refugees or have sought asylum, might be caused by present or past conflicts, with alcohol abuse sometimes a contributing factor. According to Scandinavian literature, unequal utilization patterns can be seen by the underutilization of patient list systems and overusing EW for trifling conditions (Dyhr, Andersen & Engholm, 2007; Blom, 2008).

Measures of psychosomatic complaints treated by GPs and the effect of health education showed that the elevating health literacy level by migrant health educators had a noteworthy positive effect on the patients' general and mental well being (Kocken, Zwanenburg & de Hoop, 2008). A Norwegian study concludes that immigrant patients diagnosed with mental disorders are more often involuntarily admitted to the hospital than natives (Iversen, Berg, Småvik & Vaaler, 2011). However, immigrants as a whole did not have a higher frequency of referral from the GP to psychiatric emergency departments (Berg & Johnsen, 2004). It is therefore likely that those patients who are referred had experienced severe symptoms that

perhaps were not recognized and treated when the symptoms manifested themselves in earlier or milder forms. This is suggested by the discrepancy between the (relatively lower) self-reported mental health needs of migrants and their (relatively higher) intake rate to psychiatric treatment (Eike, Forsetlund, Kirkehei & Vist, 2010). An Irish study showed that asylum seekers showed a higher frequency of use of GP services, as well as antibiotic and psychiatric medications, than permanent residents and the native population (McMahon et al., 2007). McMahon's study shows also a strong link between psychological illness and being a frequent user of primary health services.

Irrespective of the patient's migration background, level of health literacy, or language efficiency, patients receive the same time allotment to convey their health needs. Both migrant representatives and GPs explained that patients are given approximately 20 minutes for consultation when no translator is present or desired. At the same time a specific consultation tariff allows GPs to extend the consultation length (Normaltariff for privat allmennpraksis, 2010-2011). The results indicate that this specific consultation tariff is not generally used and the failure to take advantage of the available extra time challenges the ability of newly arrived migrants to express their needs and frustrates their access to primary care.

The notion that medical services are not received according to the perceived needs is shown within the Oslo Health Study. Here, only 42,4% of immigrants and 43,1% of the Oslo Immigrant Study reported to receive medical services as needed (Lien, Nafstad & Rosvold, 2008). It can be discussed if the experience not to receive medical service as needed might lead to an overuse or underuse of health services

were low language skills leading to a lack of compliance from the verbal communication.

Similar impediments and challenges are seen in Canada, where the Canadian Collaboration for Immigrant and Refugee Health is currently developing clinical guidelines to assist family physicians caring for recently arrived migrants (Pottie & Swinkels, 2009).

Failing to show for appointments can lead to patients falling beyond reach of the system. GPs stressed themselves that new strategies are necessary to ensure equal treatment of migrant patients. To understand the higher propensity for ethnic minorities to rate care more negatively than natives, Mead and Roland (2009) point to cultural dissonance and language problems.

6.2 Which barriers are immigrants facing within the GP Scheme

Formal barriers:

As seen as legal restrictions, organizational barriers, lack of information, lack of referral, specific services, and doctors attitudes (Noredam, Nielsen & Krasnik, 2010).

*“They, which are coming (during the first 5 years),
don’t know where or how to go to get a rGP”
(GP, female, 40, born in Poland).*

As noted above, statistics from NAV (Nossen, 2008) show that the national assignment coverage is 98,5% – a number based on the proportion of residents to whom the standardized letter, only available in Norwegian was sent up to six weeks after arrival. But this cannot be seen as an indicator of the proportion of migrants who either received or comprehended the contents of the letter. All these factors conspire

to produce what is often scanty or incorrect knowledge about the GP Scheme among newly arrived migrants.

“Patient obtains information about the GP Scheme from the local network, and it shows that the information gained is often incorrect”

(GP, male, 49, born outside Norway).

Up to the present time (November, 2011), information on HELFO’s website about the GP Scheme is only accessible in Norwegian. Results from both sub-study I and II confirm that migrants fill this knowledge gap with information – often incorrect – from within their own communities. Results from sub-study III, showing the change of probability depending on the duration of residents, indicate that it takes many years in Norway before migrants comprehend the healthcare system. This indicates that higher utilization among recent migrants may be partly explained by this lack of knowledge. Comparable results were found in Norredam et al.’s research (2004).

Information does not arrive. Have you seen it, it is totally incomprehensible!”

(Polish immigrant representative).

As migrant representatives informed, the information distributed by HELFO/NAV regarding the assigned physician and the GP Scheme is not only given in Norwegian but also sent to the address given on the day of arrival. It so fails to consider both, the new citizens' lack of comprehension of Norwegian and the often-performed change of address during the first weeks of arrival (for a copy of the enrollment letter, see app. 10.8). Information regarding the GP Scheme is sent upon initial enrollment (e.g., immigration) or after reporting change of residence outside one’s previous municipality. This information is sent in a standardized letter, 4 to 6 weeks after

immigration or registration of relocation. Only one version of this standardized letter exists, valid for both the native population and immigrants. For comprehension of the letter one requires a high level of health literacy and a good command of the Norwegian language. As noted earlier the address used for sending the Norwegian information letter is a person's address of record. For migrants, this is often a transitional address, which was reported upon registration (arrival) at the immigration office.

Gate keeping:

" It is perceived as difficult that not all EWs send information to the rGP"

(GP, male, 40, born outside Norway).

As gatekeeper to the public health system, GPs play a key role with regard to follow up treatment given at the EW and as a coordinator within the Norwegian Labor and Welfare Service (NAV). Because of this central role for patients with chronic diseases and other especially vulnerable groups, including immigrant patients and other heavy users of NAV, the collaboration and information exchange between the EW and various departments of NAV is seen as fundamental. GPs expressed dissatisfaction at not receiving a discharge summary from assigned patients after their contact at the local EW, but noted that this problem with the flow of information was not experienced with all EWs. This lack of information might obstruct the rGPs requirement to perform a correct diagnosis. Furthermore, as gatekeepers to specialized health care service, GPs expressed an expended need for information on services offered in their municipalities. A claim confirmed by Fredheim, Danbolt, Haavet & Lien (2011).

Informal barriers:

Informal barriers are grouped in containing language, communication, social/cultural factors, being new in the country, and cultural sensitivity. Those categories emerged within the interviews as they were also found in the works of Norredam et al. (2010).

“A migrant patient is a patient who does neither speak English or Norwegian”

(GP, male, 50 years, born in Norway).

Our results show that GPs categorize a “migrant patient” as a recently-arrived person with language problems coming from outside Europe, North America, and Australia.

The language ability was central to the individual GP and the investigation of the Patient’s background depended often on the patient’s country of origin and the GPs perceived cause of migration. As our results show, language skills and social/cultural background appear to determine how patients are seen by their GP as the GPs are responsible for identifying psychological, social, and somatic problems.

An unawareness of the patients’ background, as indicated from our informants, could lead to misinterpreted information. A local article (Varvin & Åsland, 2009)

stressed the importance of GPs’ responsibility to identify the psychological, social, and somatic problems of immigrants with a refugee background. Though GPs have the main responsibility for this vulnerable group, they experienced an inadequate framework for treatment and rehabilitation and reported lack of competency and obstacles in communication. For migrants, on the other hand, overcoming those language barriers appears to be a significant factor in increasing access to the GP patterns within the Norwegian Scheme. This importance of competence in the local language is affirmed by a Dutch study (Schouten, Meeuwesen & Harmsen, 2009) concluding that GPs should check more often whether their minority patients have

understood what has been said during the medical consultation. In sub-study I and II the results indicate that GPs and immigrant patients might have experienced the interaction at the GPs office differently, with each offering contradictory accounts. While migrant representatives' opinion tended to be critical, contending that GPs did not take the time during consultations to listen or fully grasp the patient's situation. GPs, on the other hand, mentioned that immigrants came not only for medical problems but other kinds of assistance (such as help with paperwork they could not comprehend) and that they sometimes expressed symptomatology to get attention. Migrants' complaints about insufficient time and attention in consultations might be seen in relation to the fact that GPs are paid per appointment, with an assumed duration of 20 minutes which may be prolonged with a translator present and paid extra by the state (Norman, 2010).

"During the gynecological examination a female interpreter should be present, otherwise you don't get far"
(GP, female, 40 from Poland).

GPs expressed their dependency on the translation services and found them helpful. Despite that, results in both-sub study I and II show that not all migrant patients want to use provided professional translators, especially if they come from the same local migrant group, due to confidentiality issues. This finding is confirmed by a previous Norwegian study (Kale, 2006). When in need for translation service during gynecological control, different stakeholders stressed the gender issue and the importance that the translator is female. The regular timeframe for a GP consultation is 20 minutes, and is expanded if a translator is present. Use of interpreters facilitates

patient-centered treatment are in line with the national aims. As other literature (Quill, 1989) confirms, a mismatch in communication may lead to barriers in doctor-patient communication. These barriers, if defined and understood, can be lessened, leading to enhancement of the therapeutic relationship. Another obstacle within the use of translators is the worry migrants expressed about their professionalism and trustworthiness. In both sub-study I and II the results indicate the possibility that translators have broken confidentiality. Even if it is only the source of rumors, we could detect a fear of using public translators with a migrant background and as a result, family members or close friends might be preferred.

“Immigrant patients have different cultural understandings and different expectations as well as a completely different perception of their disease”

(GP, male, 45, born in Norway with many years working experience in both Africa and the USA).

Addressing cultural barriers involves bridging cultural gaps and terms like cultural competence are used as synonyms for good practice. Our results show that GPs see themselves as collaborators for health in their interaction with patients. This interaction pattern is challenged if migrant patients see the doctor's role differently. Expectations might differ when migrants' specific treatment requests are not met or responsibility about one's own health is transferred back to the patient himself. A national study (Varvin & Åsland, 2009) showed that that the majority of physicians focus on the somatic issues and are unaware of previous trauma where the majority of GPs felt that they had insufficient experience to meet their holistic responsibility.

“Foreign GPs understand us. The Norwegian GPs don't”

(Migrant representative from Iraq).

By purposeful sampling, both GPs with and without Norway as their country of birth were enrolled. Results of both sub-study I and II indicate that foreign GPs have a higher level of culture sensitivity. It was further more noticeable that foreign GPs saw the necessity to assist their patients with extracurricular matters (as translation of letters from NAV or other authorities). This might lead to the conclusion that there are substantial differences in expectations of migrant patients and medical staff, a result of insufficient understanding of the health system and the GPs' role in the “new” country. The results indicate that in order to match health service to patients,

“diversity proof” services (specifically low threshold services) that are sensitive to the different needs of patients may be necessary.

“GP asks the patient what they think helps - because the GPs don’t know it”

(Migrant representative from Somalia).

Cultural differences might lead to GPs and migrant patients showing divergent expectations in their understanding of each other’s role. The result in sub-study I and II shows that GPs experienced high expectations on the part of migrant patients regarding the doctor’s authority and the power of medicine generally in maintaining or restoring health. This is in contrast to the ideal of the Norwegian public health system, wherein patients are seen as contributors to their own health. This policy of encouraging patient-centered consultations and joint problem-solving might be experienced by migrant patients as problematic, as many expect the GP to take control of the consultation and tell the patient what is wrong. Similar results are previously described by Brunvatne (2006:p51) and Dyregrov (1995;1997).

“GPs don’t care. Women tell they have pain everywhere but they don’t ask whether it is the mother-in-law or her husband which is difficult”

(Immigrant representative from Pakistan).

GPs in sub-study I expressed that the threshold for pain is experienced differently in persons from different cultural backgrounds and noted severe pain can be reported when no medical evidence for it can be found, while in other instances, symptoms are reported to be severe when conditions are in fact mild. When information received from a patient does not “add up” this might indicate cognitive dissonance on the part of the GP and could be a sign of a communication barrier (Quill, 1989).

Comparing results from sub-study I with results from sub-study II one might see the possibility that misunderstandings occur when some patients express problems in an unknown way to their GPs. This might lead to misunderstandings, shift of focus, and medical risks. This shifted focus from the patient's symptom to the patient as a "problem" patient was reported in a national study conducted by Sandvik & Hundskår (2010).

"Immigrant patients have little knowledge about their own body and no understanding about the disease"

(Female GP, 45, Norwegian).

Results of sub-study I implicate that the GPs' impression was that migrants' health and medical literacy were low. GPs saw both as risk factors and when addressing a problem. As GPs described both, the lack of knowledge of communicative literacy (including the ability to obtain relevant information and apply it to changing circumstances), and critical literacy (the ability to use information) data in sub-study II referred to a low functional literacy in every day situations (basic skills in reading and writing).

"They ask for help with other tasks, such as day care applications, translations of letters from NAV,.."

(Female GP, 45, Poland).

Noteworthy was that GPs expressed concern for the recently arrived migrants and their unfamiliarity with the Norwegian healthcare system in combination with their language burdens, as well as GPs complaints about patients' unrelated requests for various kinds of extra medical assistance.

“The doctor is reading in his book, it shows that the doctor does not know anything”

(Migrant representative from Somalia).

Sub study II indicates a tendency to a lower degree of satisfaction caused by “experiences” of the GP as unprofessional or not “well-educated.” A frequent reason cited was the doctor’s recourse during office visits to reference literature, such as the Norwegian Pharmaceutical Product Compendium (Felleskatalogen), which patients viewed as a sign of ignorance. Such a clash of expectations in how doctors do work can be a barrier in interactions with patients (Quill, 1989). Another complaint was that doctors failed to understand the importance of pain as signifying a medical problem. Some informants correlated satisfaction with the individual GP with language skills – the better the understanding by the doctor, the better the satisfaction of the patient. The results indicate the use of public translation services (whose availability is mandated by law) also reportedly led to problems.

“We are used to immediate access to the physician.

We are not familiar with waiting time”

(Migrant representative from Iraq).

Sub-study I and II indicate that GPs need to be aware with patients’ experience with health systems prior to emigration. As previous research (O’Donnell et al., 2008) showed, the previous healthcare system might have an impact on the patient’s expectation. If these experiences are not acknowledge and addressed, both lack of confidence and trust can undermine effectiveness during the consultation. On the other hand, a Spanish study (Buron, Cots, Garcia, Vall & Castells, 2008) concludes that the overall utilization rate on the primary care level was lower due to the “healthy migrant effect,” valid for voluntary migration because population increase by

immigrants in the hospitals catchment area did not correspond directly with an equivalent increase in emergency contacts, which is an effect that may diminish over time (Williams, 1993; Halli & Anchan, 2005). The discrepancy in utilization was also found in Norredam, Nielsen & Krasnik (2010). The results of the review suggest diverging utilization patterns between migrants and non-migrants in European literature.

Compliance, expectation, degree of satisfaction:

*The doctor asks the patient what he (the doctor) should do! The patient doesn't know
– therefore he (patient) came to the doctor!
(Migrant representative, Bosnia).*

Results in sub-study II indicate that GPs might sometimes fail in their patients' opinions by not referring migrants to specialized services as expected, resulting in patients' expectations about treatment being unfulfilled. At the same time patients might expect their GP to act as a "specialist" and assume a passive role. Assume presume Those unfulfilled expectations could be a factor in this dissatisfaction. Mercer, Reilly & Watt (2002) found that patients' expectations of a health benefit from a doctor's visit is a key determinant of their satisfaction with a consultation, while Dyregrov (1995) in her study found comparable dissatisfactory role expectations.

6.3 Which factors might contribute migrants' participation to the GP Scheme

Sub-study III aims to scrutinize eventual existing disparities whereas sub-studies I and II might explain why they exist. The literature search showed that the qualitative studies are needed to reassemble variables to determine the effect of access to health care for immigrants in a different health care system.

Within the conceptual framework, the health service utilization model, developed by Andersen (1995), we investigated the relationship of personal and population characteristics, utilization patterns and the National Health system.

As our results indicate, the effect for time of residence varies by gender and the difference between immigrant groups is smaller than the difference between men and women within these groups.

A study by Aung, Rechel, & Odermatt (2010) including Asian migrants living in London concluded that having a shorter duration of stay is one of the main barriers for accessing primary health care. As our results show the duration of residence influences the probability of visiting the EW and the impact is largest during the first years after arrival. This might lead to the assumption that information does not reach the newly arrived resident as the fact that many immigrants after arrival are working in blue collar work, as Carballo & Mboup (2005) pointed out, migrants have higher rates of occupational injuries among migrant workers.

Results of paper III indicate large differences between individuals from various migrant groups with regard to probability of visiting the EW.

Individuals from United Kingdom and Germany, with an average of more than 18 years in Norway, showed a proportion of emergency visits lower than individuals born in Norway, while individuals from Sri Lanka, Iraq, and Pakistan showed a lower adaption regarding the duration of residence. Still the descriptive statistics in sub-study III provide partial support for the hypothesis that the length of residency influences the use of emergency services.

Potential practical implications and limitations of the research in a broader context are discussed before summarizing in the conclusion.

6.4 Ethical considerations

All participants included in sub-study I and II were informed about the purpose of our study prior to the interview and thereby, invited to participate, gave their written consent.

A standardized form, proposed and approved by the committee, asking for subjects' informed consent was given to each subject before enrolling. Since the Regional Committee for Medical Research Ethics only accepted a content for the informed consent being the standardized size, the task of ensuring that all interviewees are reading the context became challenging. During the interviews of sub-study I and II, none of the participants sought to take the time to fully comprehend the standardized forms. With participants expressing that the form was overwhelming, the interviewer therefore needed to verbally explain the contents before each individual signed.

The basic ethical imperatives in research are 1st *ex ante* (predictability of people), 2nd participation in research should not lead to harm, and 3rd investigators will act in the participants' best interest (Holm & Harris, 2008). The project guidelines aimed to incorporate these imperatives and benefit (or at least not harm) the population under study and respect the participants' dignity.

Considering that one finding of the study could be glossed as asserting that migrants' resistance to participate in society may result from language problems and culturally-defined behavior (Carballo & Nerukar, 2001), it is important that the present results be contested in a way that avoids reinforcing stereotypes about what are diverse minority groups. In order not to harm the participants belonging to subpopulations, it sometimes means that researchers must be cautious about highlighting results that might support stigmatizing stereotypes and prejudices about how a certain group is

culturally determined in their attributes. No less it is important to distinguish between recognizing a culture's norms and endorsing them (Helman, 1994).

The study was approved by the National Committees for Research Ethics nr. 437 08437 and 2008/10427 and the Data Protection Agency (Ombudsmen f. Ullevål: 1206).

6.5 Directions for future research

Within the Coordination Reform (Hansen, 2008) the accessibility to health services, monitoring of health status and service use needs to be focused on.

For that standardized categories relating to both ethnicity and cause of migration need to be available. As by today only, the country of birth is known to the National Population Registry. As country of birth does not always indicate ethnicity, cause of migration needs to be available. By that we implicate that future research within Norwegian primary care should include both immigrants and descendants, but be addressed separately.

This assumption is based on Adamsom et al. (2003), indicating that accessibility is significantly correlated to the immigrants time of residence and that inequalities descendants may face appear at the referral stage. Growing up within the Norwegian education system descendants born in Norway have equal information about the GP Scheme as Norwegians with Norwegian-born parents. Research within migrant populations should not be subject to discrimination whether the origin is from a high or low income generating country. In order to prevent informal barriers to the GP Scheme a focus should also be set to new arriving immigrants in the future.

Up to today, health service research in Norway is mainly including participants with a fair knowledge of Norwegian. In order to get a study population representative for the population and to investigate barriers within health systems also recently arrived migrants with a low command of the local language should be included in study designs.

7. CONCLUSION AND PRACTICAL IMPLICATIONS

Access to health care is a leading health indicator and barriers to access it include cultural differences, language barriers, and discrimination. The goal of improving health among those underserved suggests the importance of reducing barriers to clinical preventive care, primary care, emergency services, and long-term care (Anderson et al., 2003).

The thesis aimed to explore the migrants' use of the GP Scheme and why disparities in access might exist. Differences in utilization were recognized (sub-study I, II, and III) and the web of causation illustrated leads to the following conclusion.

7.1. Conclusions

Despite the “*healthy migrant effect*” and its wearing off over time, it should be discussed if the higher utilization of health care services is caused by the fact that newly arrived migrants often work in unskilled blue collar labor. This physical impact and the stressful period after arrival will have an impact on migrants' health. This conclusion is also seen by Williams (1993) and Halli & Anchan(2005).

In need for medical assistance, the migrant's choice between the assigned GP and the EW might depend on the following.

Factors that contribute to migrants' participation in the GP Scheme

Under the assumption that *continuity in the physician-patient relation* is a key factor in order to ensure quality of care, there is room for improving quality of care for large groups of patients by providing minority groups with better information about the GP Scheme. A suggestion for policy is to improve communication about the organization

of the Norwegian health care sector to newly arrived immigrants. As results indicate, HELFO on one side distributes information and enrolls the newly arrived immigrant on a list of a GP close to the address registered in the system. On the other side we encountered that newly arrived immigrants do not always receive this information. Therefore, it is vital that information about the GP and the Scheme will reach the newly arrived immigrant in a comprehensible format.

It is now evident that *information about the GP Scheme needs to be adapted to* various groups of recently arrived migrants, *both linguistically and logistically*. As the birth country is accessible for HELFO, linguistically adapted information can be dispensed. The Norwegian eleven-digit birth number or the D-number for people without permanent residence is assigned by the National Population Register and maintained by the Norwegian Tax office. As this registration is a basis for various public registers, *information, importance and feasibility for updating addresses in the register* must be both stressed and provided.

To ensure that information about the GP Scheme is comprehended and the address of the rGP is known, it could be discussed if *an initial visit, free of charge*, would encourage and establish a doctor-patient relationship and first thereafter release the reimbursement for the assignment to the GPs' list.

Furthermore monitoring patients on existing GP lists without initial contact data should be initiated.

Religious communities visited by migrants and migrant communities and organizations should be informed about the GP Scheme and thereafter urged to inform members verbally.

Factors that contribute to patients' equitable access of their assigned GP

Accessibility primarily is defined as being able to *get an appointment with the rGP*. An obstacle that encounters the secondary accessibility is challenging equity by an equal *length in consultation time*, despite the possibility of a prolongation. Both patient and rGPs should be aware and take use of a prolonged timeframe.

As patients without sufficient knowledge arrive under fault conditions at the EW, the *screening personnel at the EW* will be able to identify those cases needing to refer, inform, or assist patients to understand and to enroll in the Scheme.

Measurements to improve information about the GP Scheme

After ensuring that information about the GP Scheme reaches the newly arrived immigrant in a *comprehensible version (in the immigrant mother tongue) immediately after arrival* other measurements could be taken to inform previously arrived migrants: As immigrants are prone to *minority groups and certain media* those channels sought need to be addressed. Channels of importance are various religious congregations, the council of immigrant organizations, the easy-to-read newspaper *Klar Tale*, and the TV channel Migrapolis.

Measurements to improve information within the GP Scheme

Each *consultation at the EW* should be documented and thereafter distributed directly to both the rGP and the patient. While the patient would have the possibility to gain information at a source of trust the rGP would be holding essential information about his or her client.

As by today not all EWs are sending a discharge summary; the rGP will not be able to follow up the treatment or have information to investigate for possible underlying causes leading to a visit at the EW.

7.2 Practical and political implications of the results

The importance of immigrants' access to health care services, both from a pragmatic but also from a moral standpoint, are explained in the introduction. As illustrated during the discussion, although Norway is a country with the universal right to health care for legal residents, immigrants still experience obstacles within accessibility. The conclusion represents a challenge to policy makers. Migrants' health and their access to the GP Scheme should be incorporated in the health policy on every political level. This aspect should be considered in the National Health plan for Norway as the National Health plan (2007-2010) by the Norwegian Ministry of Health and Care Services (2006) only mentions immigrants and migration while no post focuses on ethnic minorities. Even in the Coordination Reform (Norwegian Ministry of Health and Care Services, 2009), the word immigrants is only mentioned throughout, and the word ethnic-minorities is only mentioned in the introduction. Still with the aim of coordination of services to meet all patients, focusing on the prevention of diseases and the development of changing the range of illnesses it can be expected that the reform will focus on this group of disadvantaged residents during the implementation of the reform.

The structure of the health service needs to reflect on the diversity and the changing demographics in Norway. The structure needs therefore to enforce a dual delivery to meet those emerging service needs that covers the "mainstream" population and

allows for separate services for vulnerable groups like immigrants. Those services should not replace the “mainstream service,” rather guide the way for them.

Introduction and information to existing schemes like the GP scheme need to be applied systematically within awareness campaigns addressing the various groups of immigrants in their own language.

To develop cultural competence, a multicultural staff should be educated, hired, and in leading or teaching positions in both educational institutions and health care providers.

At the same time, and in order to optimize the condition, the topic of migration health should be found on curriculums within education programs for various health personnel.

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9.3 Paper III

Manuscripts submitted to European Journal of Public Health



Use of Primary Care Emergency Services in Norway: Impact of Birth County and Duration of Residence.

| | |
|-------------------------------|---|
| Journal: | <i>European Journal of Public Health</i> |
| Manuscript ID: | Draft |
| Manuscript Type: | Original Manuscript |
| Date Submitted by the Author: | n/a |
| Complete List of Authors: | Goth, Ursula; University College Oslo and Akershus, Health Sciences; University of Oslo , Med. fac. Godager, Geir; University of Oslo, Helsam |
| Keywords: | Migrant/immigrant , General practitioner (GP), Access, Norway , Emergency ward/emergency department |

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Use of Primary Care Emergency Services in Norway: Impact of Birth Country and Duration of Residence

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Grant:

This project has been financially supported by the Norwegian Extra Foundation for Health and Rehabilitation through EXTRA funds.

Conflict of interest:

The authors have no actual or potential conflict of interest including financial, personal or other relationships with other organizations that could inappropriately influence or be perceived to influence our work.

Key words:

Migrant/immigrant, Norway, utilization, access, general practitioner

Key points

- Immigrants use emergency care more often than individuals without an immigrant background do.
- The differences among immigrant groups are smaller than the differences between men and women within these groups.
- There are large differences among individuals from various migrant groups with regard to the probability of visiting the EW.
- The differences among immigrants from the same birth country but different durations of residence in their new country are often larger than the differences among individuals from different countries.
- Duration of residence influences the probability of visiting the EW, and the impact is largest during the first years after arrival.

ABSTRACT

Objective:

In Norway, the General Practitioner Scheme was established in 2001. Satisfaction with the system is generally high. However, people often choose to visit community-based emergency wards (EW) for routine care instead. The aim of this paper is to describe which factors influence the choice of seeking care at the EW.

Design, setting, and patients:

Prior national research on utilization patterns has been based mostly on surveys showing a low response rate. By using merged register data, we analyzed the choice of the EW as a care provider in Oslo (Norway) for 2006 and 2007. Applying 1,934,248 observations of 279,531 different individuals, we estimated the probability of choosing the emergency ward for the Norwegian-born population as well as for the 14-largest immigrant groups. Substantial variation between groups was identified.

Main outcome:

The proportion of EW visits was highest among patients from Somalia (11.7 percent) while the lowest proportion of EW users was among immigrants from Germany and Vietnam (5.3 percent). The results vary substantially within individual migrant groups; gender, age, and the duration of residence each influence the probability of visiting an EW.

Conclusions:

We found large differences in the probability of using an EW between individuals from immigrant populations, presumably because of barriers in access to primary care. Continuity in the physician–patient relationship is an important policy goal. A suggestion for policy is thus to improve communication about the organization of the Norwegian health-care sector to newly arrived immigrants, as well as to patients at the EW.

1 Introduction

Over the last decade, public health policy in Norway has undergone structural changes with the aim of reducing inequities in service provision (1). A key reform introduced in 2001 was the Regular General Practitioner Scheme (RGP Scheme), under which patients voluntarily choose a general practitioner (GP). The GP serves as a gatekeeper for secondary care and is responsible for preventive care and follow-up treatment and is, or should be, the first point of contact within the primary health-care system, financed by national taxation. The vast majority of inhabitants participate in this RGP Scheme organized as a patient list system (2, 3). Statistics Norway notes that, as of 2011, 12 percent of Norway's population were immigrants or descendants of immigrants. In Oslo, the capital, the immigrant population comprised 28 percent of the population (4).

The RGP Scheme in Norway is available to all legal residents intending to stay longer than six months. Individuals coming to a foreign culture with an unfamiliar language may encounter linguistic and cultural barriers that could, in turn, cause a different utilization pattern with respect to primary care services. The result may be poorer quality of care (5).

Our point of departure is that newly arrived residents are not equally well-informed about the organizational structure of the health sector. Norway is a country where people have, on average, a high socio-economic status. Migrants from non-Western societies often have a lower socio-economic status and encounter problems in obtaining access to health-care services (6). A stable, ongoing relationship with a GP may contribute to a broader perspective on a patient's situation and facilitate

appropriate treatment and preventive care. The diversity of the immigrant population along the dimensions revealed in this study both indicates the challenge and helps suggest the path forward toward the goal of providing equal access to health care. Residents seeking medical care for acute illness may choose between two providers within the primary health-care system, an assigned GP or the local EW.

Local research including immigrants was, up to this date, based mostly on questionnaire surveys showing a low response rate. Objective data is needed to outline actual contact patterns.

This study examined the factors affecting individuals' decisions whether to consult with a GP or the municipality's emergency ward (EW), which is intended for urgent treatment. Using the results from two qualitative interview studies (7, 8) conducted in Oslo that included GPs and representatives of immigrant organizations, we specify the following two main hypotheses:

Heterogeneity hypothesis:

Immigrants differ in their propensity to visit the EW compared to the rest of the population.

Duration of residence hypothesis:

The probability of EW visits among immigrants is influenced by their duration of residence in the country.

We expected that one of the main factors that contribute to variation in the use of emergency services is the individual's probability of experiencing an emergency. In addition, we expected that age and gender influences the probability of seeking primary medical care.

2 Data and methods

Data set and study population

The data set is based on two independent public registries merged by Statistics Norway (SSB). Demographic data with socio-demographic details for residents of Oslo born after 1987 were collected from the official National Population Register and merged with data routinely collected from consultation records. The latter forms the basis for GPs' reimbursements. Only residents consulting either the EW and/or GP in 2006 and 2007 are included. In Oslo, the primary-care sector has a homogeneous structure and organization; hence, concern about heterogeneity in the organizational structure of the primary sector is thus accounted for by restricting our sample to inhabitants of Oslo.

The data file included repeated observations of each individual. We accounted for individual-specific, unobservable heterogeneity related to the choice between consulting a GP or an EW. We accounted for unobservable heterogeneity at the level of the individual by estimating two random effects in logistic regressions that address our two hypotheses. We distinguished between immigrants belonging to the 14-largest migrant populations, other migrants, and residents born in Norway (9).

Variables

The outcome variable is the observed utilization of the EW. We included "indicators of immigration background" and "indicators of birth country" as explanatory variables. Individuals' ages, genders, and lengths of residence were included, in addition to the

total number of yearly contacts with primary-care services.

The operational categorization of variables “Immigrant,” “Birth Country,” and “Duration of Residence” were based on Statistics Norway’s definitions (10).

All primary-care consultations, both GP consultations and EW consultations, in Oslo for the years 2006 and 2007 are registered. A total of 1,935,000 consultations are included, and all are individuals born after 1987 (≥ 19). We distinguished between the 14-largest immigrant groups as of 2006, according to Statistics Norway. In descending order according to population, the groups are from the following countries: Sweden, Denmark, Iraq, Pakistan, Somalia, Bosnia and Herzegovina, Iran, Germany, Vietnam, Poland, United Kingdom, Russia, Turkey, and Sri Lanka (Statistics Norway, 2010). Data analysis was performed by means of maximum likelihood using STATA 11.

3 Results

The results are organized as follows:

- In section 3.1, we present the estimation results when estimating the impact of different immigration backgrounds on the probability of seeking emergency care.
- Results from estimating the impact of time since migration for the subsample of immigrants with two non-Norwegian-born parents are presented in section 3.2. Descriptive statistics for the subsample of immigrants with two non-Norwegian-born parents are presented in Table 1.

Residents from Norway’s two neighboring countries, Sweden and Denmark, have a different utilization pattern; the proportion of emergency ward visits is almost 50

percent higher among people from Sweden than the corresponding proportion among people from Denmark. We observed, however, that on average, individuals from Denmark have been in Norway for a longer period compared to individuals from Sweden.

Similarly, we observed that individuals from Great Britain who have spent an average of more than 18 years in Norway also have a relatively low proportion of emergency ward visits, while individuals from Iraq and Russia, who have an average duration of residence of less than 8 years, have a relatively high proportion of emergency ward visits.

3.1 Are immigrants more likely to use emergency services?

Descriptive statistics

Table 1 contains a description of the relative sizes of groups with different immigration backgrounds. This table shows that the two dominant groups consist of individuals without an immigrant background (73 percent) and individuals who were both born outside of Norway and have two non-Norwegian parents.

Table 1 here

Table 1 indicates that the average proportion of emergency ward visits is lower in the group consisting of individuals born in Norway to two Norwegian-born parents

compared to the other groups. There appears to be a difference in age between immigrant and non-immigrant groups. Individuals with immigrant backgrounds appear to be younger than the average Norwegian-born individual. The lower proportion of emergency ward visits among individuals born in Norway with two Norwegian-born parents can partly be explained by differences in age.

Table 2 here

Table 2 contains the estimated impact of immigrant status and other observable variables on the probability of seeking care at the EW. Our results indicated that immigrants with non-Norwegian-born parents have a higher probability of seeking care at the EW compared to individuals without an immigration background ($p < 0.001$). The results also suggested that females have a lower probability of emergency ward visits, and this effect appears to be stronger in magnitude, as measured by the odds ratio, than the impact of immigrant background. We also observed that the estimated odds ratio of the variable *yearly visits* is negative, i.e., frequent users of primary-care services are less likely to seek care at the EW in events of illness. We estimated the impact of age by grouping subjects into 16 different age categories, where the youngest group is the reference category. The results show that young individuals have a higher probability of seeking care at the EW compared with middle-aged individuals. We observed a pattern consistent with high probability of emergency ward visits among youths and the elderly, while individuals in their early 60s have the lowest probability of emergency ward visits. To give a visual impression of the impact of age, gender, and immigrant background, we computed the predicted probabilities based on the estimated parameters presented

in Table 2 for an individual with two yearly visits, and these predicted probabilities are presented in figure 1. We observed that the probability of seeking care at the EW declines as individuals' ages rise, until a turning point is reached at age 65, when the probability starts rising.

Figure 1 here

3.2 Impact of duration of residence

The results of estimating the impact of time since migration on the probability of visiting the EW are presented in Table 3. The model was estimated by means of a random effects logistic regression. Because the duration of residence is defined only for individuals with immigrant backgrounds, only individuals with immigrant backgrounds were included in this regression analysis.

Table 3 here

The estimated impact of the duration of residence and birth country among immigrants on the probability of seeking care at the emergency ward is based on 387,927 observations of 51,771 individuals, with an average of 7.5 observations per individual, and was estimated by means of random effects logistic regression. We allowed for the impact of the duration of residence to show variation between males and females and to be dependent on birth country. In this way, we may investigate whether time since migration influenced individuals originating from different countries differently. In addition, by including the square of the duration of residence,

$Duration^2$, we may also test whether a marginal increase in time since migration influences the probability of emergency ward visits differently when the time since migration is short compared with a longer time since migration. We observed that the duration of residence has a negative and statistically significant effect among the immigrants from all countries except for Denmark, Somalia, Russia, and Iran. Hence, we find support for our second hypothesis, that the duration of residence influences the probability of seeking care at the EW. We also observed that the estimated odds ratio of $Duration^2$ is significantly larger than one, which indicates that the marginal impact of the duration of residence on the probability of emergency ward visits is smaller when many years have passed since migration. Table 3 shows that the estimated impact of the variable *Female*Iraq*residence* has an estimated odds ratio larger than one. This suggests that the impact of the time since migration is smaller for females from Iraq than for males from the same country. A similar effect can be observed for females from Pakistan. Figure 2 gives a visual impression of how duration of residence influences the probability of seeking care at the EW (based on estimated parameters presented in Table 3) as it varies by birth country.

Figure 2 here

In figure 2, we have fixed the age and gender variables as well as the number of yearly visits, and the presented probabilities are for a female at 45 years with two primary-care consultations per year. In order to compare these conjectures with the predicted probability of a similar Norwegian woman, we have, for reference, included in figure 2 the corresponding predicted probability for a Norwegian woman with the same observable characteristics. This predicted probability is not related to the measure of the duration of residence and is therefore a flat line. Predicted

probabilities for immigrants from Denmark, Russia, Somalia, and Iran are not included because the duration of residence did not have a statistically significant effect for people from these countries.

4 Discussion and conclusion

Based on over 1.9 million consultations, our results presented in Table 2 support the hypothesis that immigrants differ from the group of Norwegian-born with two Norwegian parents with respect to EW utilization. Further, our results presented in Table 3 suggest that dimensions such as birth country and duration of residence account for much of this variation. We find support for the second hypothesis, that duration of residence influences the utilization of emergency ward services. We thus find that immigrants are not a homogeneous group with respect to choice of provider, a result confirmed by other European studies (11–13). In fact, the results suggest that the differences in the probability of seeking care at the EW between a newly arrived immigrant and an immigrant from the same country who has been living in Norway for many years can be larger in magnitude than differences between individuals from different birth countries. The decreasing probability corresponds to results from previous studies (2, 14). Hence, one could argue that the duration of residence and age are key factors explaining the use of services at the EW.

Immigrants to Norway, who have surmounted the obstacles of European migration laws, might be healthier than those who do not leave their countries of origin. This “healthy migrant effect” is likely to wear off with time (15). Although this effect would not necessarily influence utilization of GPs versus EW services, better health — other factors being equal — would be expected to dampen one of the tendencies found in this study: migrants with shorter tenure in Norway use emergency ward services more frequently. As studies of EW use show, there is a higher utilization rate among immigrants compared to the rest of the population (16). Our results show that age-

and gender-related variations in health utilization showed the same trends as previous studies (16, 17).

Mainstream models like the GP Scheme are designed for the majority population. This implicates an expectation that minority groups with their heterogeneity are expected to use the same health-care services with the same frequency as the majority population. Results from qualitative studies (7) indicate that possible explanations for the differences include linguistic and cultural barriers experienced by the new arrivals. These barriers are likely to mitigate as time goes by, and the reduction in EW utilization may thus partly be caused by better access to information. A postulation confirmed by both Norwegian and Danish studies (7, 12, 13) reveals that informal barriers such as a lack of familiarity with the system, lack of information, and lack of accessibility to their GP are reasons why some individuals prefer EWs to GP appointments. Preventing sickness, one of the main purposes of GPs, might be seen as a foreign concept.

There are some limitations that need to be acknowledged. Data for the present study include only residents contacting a GP during the given time period. This suggests that we cannot account for residents without contact. Furthermore, country definitions by Statistics Norway do not capture the diversity of ethnic populations within countries of origin (18) (e.g., regarding the Kurdish population in Turkey, Iran, and Iraq).

Growing cultural diversity presents a challenge to equitable health care (19). Developing capacities to respond to the diverse range of new migration challenges will require avoiding a “one size fits all” policy in primary health-care services. The results of Norwegian studies (7, 8, 19) indicate a lack of information received by

migrants regarding the primary health system and suggest that this is a significant obstacle. The following question may be raised: “Is the diversity of migrant backgrounds and circumstances affecting migrants’ ability to navigate the health-care system?” Measuring how migrants are succeeding in the Norwegian health-care system will require disaggregated data and diversity in categorization of migrants (20) for years to come. This study suggests areas in which data collection could focus and help distinguish subpopulations of particular interest.

Research is needed to illuminate both the reception and comprehension of initial information provided by the authorities and comprehension about the GP Scheme, initially to all residents.

Acknowledgement

This work was financially supported by the Norwegian ExtraFoundation for Health and Rehabilitation through EXTRA funds (grant number: YC82XY/Nasjonalforening for Folkehelse). The National Centre for Emergency Primary Health Care (Unifob Bergen) developed the idea and original protocol drafts for this part of the project, and the authors thank the Centre for Emergency Primary Care for its contribution. The authors also thank Professor John E. Berg, PhD, at the University College for Oslo and Akershus for his advice and ideas in the development of the present protocol. The authors are grateful for comments and suggestions from participants at the research forum at Helse Sør-Øst Health Services Research Centre in March 2011.

Ethics approval

Regional Committees for Medical and Health Research Ethics (REK) approved this research project and the construction of the database.

Rules of law for medical and health research are given in the Research Ethics Act and the Health Research Act. Furthermore, the owner of the registries, the Directorate of Health, NAV, and the Ministry of Health and Care services gave their approval to use their data for the purposes of the study.

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Tables and figures:

Table 1:

Use of emergency services according to background for residents of Oslo based on data collection in a 2-year period 2006-2007.

| Observation of unique residents of Oslo , N=279,531 | Means of Variables[95% Confidence intervals] | | | | |
|--|--|--|--|---------------------|---------------------------|
| | Demographic background | % Emergency visits 100* Σ EW/ (Σ GP+ Σ EW) | Average number of yearly visits (EW and GP together) to primary care | Age | Female |
| Migration background based on Statistics Norway | | | | | |
| No immigrant background (N=204,998) | 73.34 % [73.17%-73.50%] | 6.62 % [6.54 %-6.70 %] | 4.2 [4.2-4.2] | 48.5 [48.4-48.6] | 57.0 % [56.7 %-57.2 %] |
| Immigrant born outside Norway, 2 non-Norwegian parents (N=53,499) | 19.14 % [18.99 %-19.28 %] | 7.71 % [7.54 %-7.88 %] | 4.7 [4.6-4.7] | 40.8 [40.7-40.9] | 54.2 % [53.8 %-54.6 %] |
| Born in Norway, 2 immigrant parents (N=3,913) | 1.40 % [1.36 %-1.44 %] | 9.91 % [9.23 %-10.59 %] | 4.1 [3.9-4.2] | 26.3 [26.1-26.5] | 52.0 % [50.5 %-53.6 %] |
| Born outside Norway, 1 Norwegian parent (N=2,475) | 0.89 % [0.85 %-0.92 %] | 6.02 % [5.34 %-6.71 %] | 3.7 [3.6-3.8] | 39.5 [39.0-40.0] | 56.6 % [54.6 %-58.5 %] |
| Born in Norway, 1 immigrant parent | 4.27 % | 7.07 % [6.72 %-7.42 %] | 3.6 | 38.0 | 53.9 % [53.0 %-54.8 %] |

| | | | | | |
|--|---------------------------|---|------------------|---------------------|---------------------------|
| (N=11,929) | [4.19 %-4.34 %] | | [3.6-3.7] | [37.8-38.3] | |
| Born outside Norway of Norwegian parents (N=2,717) | 0.97 % [0.94 %-1.01 %] | 6.29 % [5.61 %-6.96 %] | 3.8 [3.6-3.9] | 37.1 [36.6-37.5] | 60.5 % [58.7 %-62.3 %] |
| TOTAL (N=279,531) | 100% | 6.89 % [6.82 %-6.96 %] | 4.2 [4.2-4.2] | 46.1 [46.0-46.1] | 56.3 % [56.1 %-56.5 %] |

Observation of immigrant residents with observed duration of residence, born outside Norway, 2 non-Norwegian parents. N=51,771

Means of Variables[95% Confidence intervals]

| Birth country | Years in Norway | % Emergency visits | Average number of Yearly visits to primary care | Age | Female |
|-------------------|---------------------|---------------------------|---|---------------------|---------------------------|
| Sweden (N=3,958) | 10.0 [9.7-10.4] | 8.9 % [8.2 %-9.6 %] | 3.6 [3.5-3.7] | 38.2 [37.8-38.6] | 59.7 % [58.2 %-61.3 %] |
| Denmark (N=1,675) | 21.6 [20.8-22.4] | 6.0 % [5.1 %-6.9 %] | 4.0 [3.8-4.2] | 50.6 [49.8-51.4] | 55.8 % [53.4 %-58.1 %] |
| Poland (N=1,458) | 11.0 [10.5-11.6] | 10.0 % [8.7 %-11.3 %] | 3.9 [3.7-4.0] | 41.0 [40.3-41.6] | 57.6 % [55.1 %-60.2 %] |
| Iraq (N=1,920) | 7.6 [7.4-7.8] | 8.9 % [8.0 %-9.7 %] | 5.5 [5.2-5.7] | 34.2 [33.7-34.6] | 44.6 % [42.4 %-46.9 %] |
| Germany (N=1,013) | 15.7 [14.6-16.7] | 5.3 % [4.2 %-6.3 %] | 3.8 [3.6-4.0] | 45.9 [44.8-46.9] | 59.2 % [56.2 %-62.3 %] |
| Bosnia (N=1,205) | 12.5 [12.2-12.8] | 7.8 % [6.8 %-8.9 %] | 4.7 [4.4-4.9] | 42.6 [41.7-43.5] | 53.7 % [50.9 %-56.5 %] |
| Somalia (N=2,660) | 8.9 [8.7-9.1] | 11.7 % [10.8 %-12.5 %] | 5.0 [4.9-5.2] | 34.8 [34.4-35.2] | 52.8 % [50.9 %-54.7 %] |

| | | %] | | | |
|-----------------------|-------------|---------------|------------|-------------|-----------------|
| | 16.6 | 7.0 % | 5.7 | 39.6 | 51.3 % |
| Pakistan (N=6,113) | [16.4-16.9] | [6.6 %-7.4 %] | [5.6-5.9] | [39.2-39.9] | [50.1 %-52.6 %] |
| | 16.6 | 5.3 % | 4.3 | 40.1 | 58.6 % |
| Vietnam (N=1.903) | [16.2-16.9] | [4.5 %-6.1 %] | [4.1-4.5] | [39.5-40.7] | [56.4 %-60.9 %] |
| | 7.3 | 6.0 % | 4.2 | 37.2 | 78.4 % |
| Russia (N=746) | [6.8-7.7] | [4.8 %-7.2 %] | [4.0-4.5] | [36.3-38.1] | [75.5 %-81.4 %] |
| | 13.0 | 7.2 % | 5.2 | 39.7 | 49.2 % |
| Iran (N=2,323) | [12.7-13.2] | [6.5 %-8.0 %] | [5.0-5.4] | [39.2-40.2] | [47.1 %-51.2 %] |
| | 18.1 | 6.1 % | 3.7 | 48.1 | 40.9 % |
| Great Britain (N=937) | [17.0-19.1] | [4.9 %-7.3 %] | [3.4-3.9] | [47.1-49.1] | [37.7 %-44.0 %] |
| | 14.8 | 8.0 % | 5.4 | 37.7 | 48.7 % |
| Turkey (N=1,838) | [14.4-15.2] | [7.1 %-8.9 %] | [5.2-5.6] | [37.2-38.3] | [46.5 %-51.0 %] |
| | 13.2 | 8.0 % | 5.2 | 39.1 | 51.6 % |
| Sri Lanka (N=2,878) | [13.0-13.4] | [7.3 %-8.7 %] | [5.0-5.3] | [38.7-39.5] | [49.7 %-53.4 %] |
| | 13.1 | 7.6 % | 4.4 | 40.5 | 55.0 % |
| Other (N=21,144) | [12.9-13.2] | [7.3 %-7.9 %] | [4.4-4. 5] | [40.3-40.7] | [54.3 %-55.7 %] |
| | 13.3 | 7.7 % | 4.6 | 40.0 | 54.1 % |
| Total (N=51,771) | [13.2-13.4] | [7.6 %-7.9 %] | [4.6-4.7] | [39.9-40.2] | [53.7 %-54.5 %] |

Table 2:

The estimated impact of individual characteristics on the probability of seeking care at the EW. Results from random effects logistic regression

| Independent variables | OR | [95 % C. I.] |
|---------------------------------|-----------|---------------------|
| Age. (Reference category | | |
| age<25) | | |
| Age group 25-29 | 0.6572*** | [0.6309,0.6847] |
| Age group 30-34 | 0.4981*** | [0.4777,0.5195] |
| Age group 35-39 | 0.4448*** | [0.4255,0.4649] |
| Age group 40-44 | 0.4034*** | [0.3849,0.4228] |
| Age group 45-49 | 0.3492*** | [0.3323,0.3669] |
| Age group 50-54 | 0.2895*** | [0.2750,0.3049] |
| Age group 55-59 | 0.2690*** | [0.2552,0.2836] |
| Age group 60-64 | 0.2529*** | [0.2397,0.2668] |
| Age group 65-69 | 0.2658*** | [0.2501,0.2826] |
| Age group 70-74 | 0.3016*** | [0.2834,0.3210] |
| Age group 75-79 | 0.4096*** | [0.3866,0.4340] |
| Age group 80-84 | 0.6402*** | [0.6055,0.6769] |
| Age group 85-89 | 1.0128 | [0.9537,1.0756] |
| Age group 90 or older | 2.1366*** | [1.9703,2.3170] |
| Gender | 0.7155*** | [0.7008,0.7305] |
| Yearly visits | 0.9734*** | [0.9717,0.9751] |

(Reference category: No
immigrant background)

| | | |
|--|-----------|-----------------|
| Immigrant born outside Norway, 2 non-Norwegian parents. | 1.2009*** | [1.1705,1.2322] |
|--|-----------|-----------------|

| | | |
|--|-----------|-----------------|
| Born in Norway, 2 immigrant parents | 1.1177*** | [1.0314,1.2111] |
|--|-----------|-----------------|

| | | |
|---|--------|-----------------|
| Born outside Norway 1 Norwegian parent | 0.9232 | [0.8227,1.0360] |
|---|--------|-----------------|

| | | |
|---|--------|-----------------|
| Born in Norway, 1 immigrant parent | 0.9949 | [0.9439,1.0487] |
|---|--------|-----------------|

| | | |
|---|--------|-----------------|
| Born outside Norway of Norwegian parents | 0.9256 | [0.8296,1.0327] |
|---|--------|-----------------|

| | |
|------------------------|-----------|
| Number of Observations | 1 934 248 |
|------------------------|-----------|

| | |
|-----------------------|---------|
| Number of individuals | 279 531 |
|-----------------------|---------|

| | |
|---|-----|
| Average number of observations. pr. individual: | 6.9 |
|---|-----|

* p<.10, ** p<.05, *** p<.01

Figure 1

The impact of age on predicted probabilities for seeking care at the EW –

Based on 1,934,248 observations by 279,531 unique individuals with 6.9

average observations pr. individual.

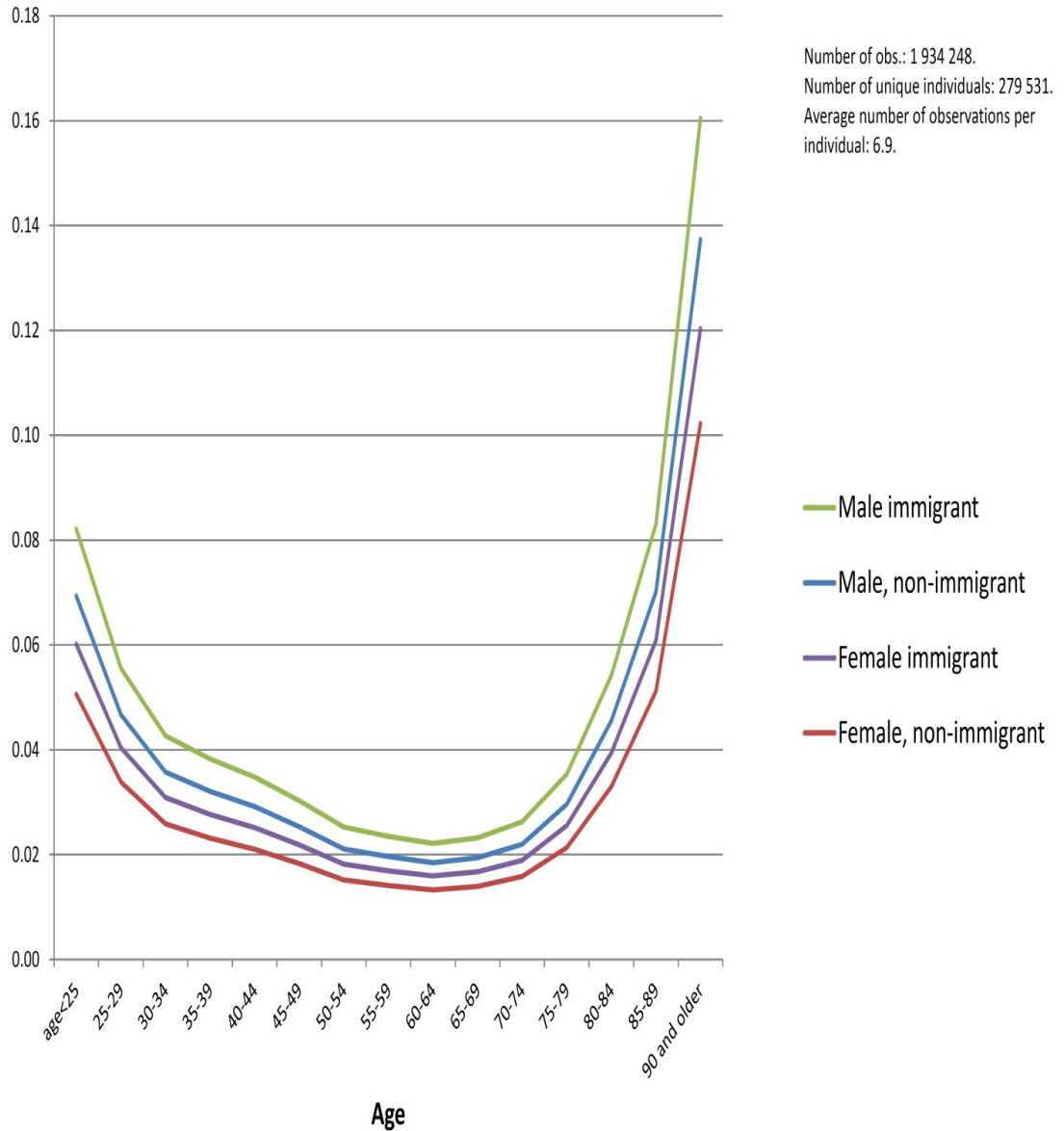


Table 3:

Table 5: The estimated impact of duration of residence among individuals with different birth countries, on the probability of seeking care at the EW. Results from random effects logistic regression.

| Independent variables | OR | [95 % C.I.] |
|---|-----------|-----------------|
| Age. (Reference category age<25) | | |
| Age group 25-29 | 0.7418*** | [0.6866,0.8014] |
| Age group 30-34 | 0.6053*** | [0.5593,0.6550] |
| Age group 35-39 | 0.5422*** | [0.4998,0.5882] |
| Age group 40-44 | 0.5176*** | [0.4750,0.5641] |
| Age group 45-49 | 0.4526*** | [0.4122,0.4970] |
| Age group 50-54 | 0.3892*** | [0.3502,0.4324] |
| Age group 55-59 | 0.3242*** | [0.2878,0.3653] |
| Age group 60-64 | 0.3400*** | [0.2965,0.3899] |
| Age group 65-69 | 0.3685*** | [0.3125,0.4346] |
| Age group 70-74 | 0.4625*** | [0.3811,0.5613] |
| Age group 75-79 | 0.5857*** | [0.4710,0.7283] |
| Age group 80-84 | 0.7129*** | [0.5524,0.9200] |
| Age group 85-89 | 1.0849 | [0.7671,1.5342] |

| | | |
|---------------------------------|-----------|-----------------|
| Age group 90 or older | 2.9589*** | [1.6781,5.2172] |
| Yearly visits | 0.9617*** | [0.9581,0.9652] |
| Gender | 0.7446*** | [0.7098,0.7811] |
| Female*Sweden*duration | 1.0000 | [1.0000,1.0000] |
| Female*Denmark*stay | 1.0000 | [1.0000,1.0000] |
| Female*Poland*stay | 1.0000 | [1.0000,1.0000] |
| Female*Iraq*duration | 1.0001** | [1.0000,1.0002] |
| Female*Germany*duration | 1.0000 | [1.0000,1.0000] |
| Female*Bosnia*duration | 1.0000 | [1.0000,1.0001] |
| Female*Somalia*duration | 1.0000 | [1.0000,1.0001] |
| Female*Pakistan*duration | 1.0000*** | [1.0000,1.0000] |
| Female*Vietnam*duration | 1.0000 | [1.0000,1.0000] |
| Female*Russia*duration | 1.0000 | [1.0000,1.0000] |
| Female*Iran*duration | 1.0000 | [1.0000,1.0001] |
| Female* United Kingdom*duration | 1.0000 | [1.0000,1.0000] |
| Female*Turkey*duration | 1.0000 | [1.0000,1.0000] |
| Female*Sri Lanka*duration | 1.0000 | [1.0000,1.0000] |
| Female*other migrant*duration | 1.0000 | [1.0000,1.0000] |
| Sweden | 1.1023 | [0.9731,1.2486] |

| | | |
|------------------|-----------|-----------------|
| Denmark | 0.6772*** | [0.5405,0.8484] |
| Poland | 1.2569** | [1.0390,1.5204] |
| Iraq | 1.1047 | [0.9150,1.3337] |
| Germany | 0.6212*** | [0.4805,0.8031] |
| Bosnia | 1.2603 | [0.8280,1.9184] |
| Somalia | 1.2867*** | [1.0878,1.5220] |
| Pakistan | 0.8898* | [0.7881,1.0047] |
| Vietnam | 0.7928 | [0.5749,1.0933] |
| Russia | 0.6956** | [0.5183,0.9337] |
| Iran | 0.9416 | [0.7562,1.1726] |
| United Kingdom | 0.8233 | [0.6156,1.1010] |
| Turkey | 1.0441 | [0.8452,1.2897] |
| Sri Lanka | 1.0486 | [0.8554,1.2854] |
| Sweden*duration | 0.9622*** | [0.9514,0.9732] |
| Denmark*duration | 0.9904 | [0.9781,1.0029] |
| Poland*duration | 0.9677*** | [0.9542,0.9813] |
| Iraq*duration | 0.9682*** | [0.9460,0.9908] |
| Germany*duration | 0.9839** | [0.9685,0.9994] |
| Bosnia*duration | 0.9607** | [0.9274,0.9952] |

| | | |
|-------------------------|-----------|-----------------|
| Somalia*duration | 1.0052 | [0.9873,1.0234] |
| Pakistan*duration | 0.9887*** | [0.9804,0.9972] |
| Vietnam*duration | 0.9683*** | [0.9482,0.9887] |
| Russia*duration | 0.9935 | [0.9623,1.0258] |
| Iran*duration | 0.9836* | [0.9669,1.0006] |
| United Kingdom*duration | 0.9701*** | [0.9541,0.9863] |
| Turkey*duration | 0.9817** | [0.9680,0.9956] |
| Sri Lanka*duration | 0.9834** | [0.9686,0.9984] |
| Other migrant*duration | 0.9797*** | [0.9733,0.9861] |
| Duration^2 | 1.0003*** | [1.0001,1.0004] |

| | |
|---------------|---------|
| Number of obs | 387 927 |
|---------------|---------|

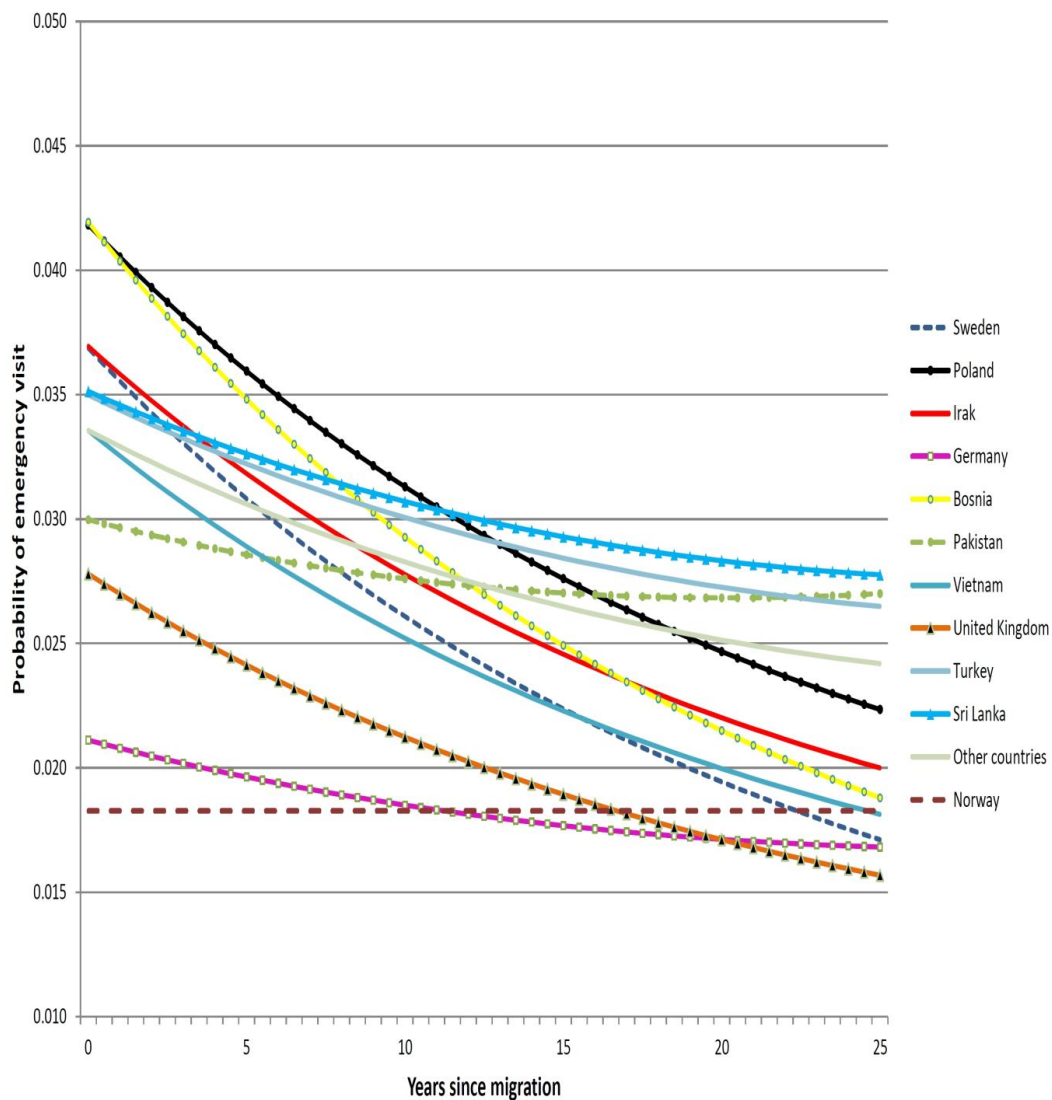
| | |
|---------------------------|--------|
| Number of unique ind.: n= | 51 771 |
|---------------------------|--------|

| | |
|--|-----|
| Average nr. of observations per individual | 7.5 |
|--|-----|

* p<.10, ** p<.05, *** p<.01

Figure 2.

The estimated impact of years of residence on the probability of an emergency visit for a female aged 45 with two primary care consultation per year, across different birth countries.



APPENDIX

Appendix Table 1:

The estimated impact of individual characteristics on the probability of seeking care at the EW. Results from random effects logistic regression when running univariate regression on each independent variable separately. (Estimates of constant terms suppressed for ease of exposition)

| Independent variables | OR | [95 % C. I.] |
|---|-----------|-----------------|
| Age. (Reference category age<25) | | |
| Age group 25-29 | 1.4601*** | [1.4169,1.5046] |
| Age group 30-34 | 1.0809*** | [1.0492,1.1136] |
| Age group 35-39 | 0.9778 | [0.9462,1.0104] |
| Age group 40-44 | 0.9008*** | [0.8686,0.9342] |
| Age group 45-49 | 0.7744*** | [0.7442,0.8059] |
| Age group 50-54 | 0.6252*** | [0.5992,0.6522] |
| Age group 55-59 | 0.5835*** | [0.5587,0.6094] |
| Age group 60-64 | 0.5369*** | [0.5134,0.5615] |
| Age group 65-69 | 0.5702*** | [0.5402,0.6019] |
| Age group 70-74 | 0.6317*** | [0.5976,0.6679] |
| Age group 75-79 | 0.8243*** | [0.7842,0.8665] |
| Age group 80-84 | 1.2162*** | [1.1601,1.2749] |
| Age group 85-89 | 1.8537*** | [1.7584,1.9542] |
| Age group 90 or older | 4.1658*** | [3.8518,4.5054] |
| Gender | 0.7394*** | [0.7238,0.7554] |
| Yearly visits | 0.9694*** | [0.9677,0.9711] |
| Immigrant background (Reference category: No immigrant background) | | |
| Immigrant born outside Norway, 2 non-Norwegian parents. | 1.1968*** | [1.1662,1.2282] |

| | | |
|---|-----------|------------------|
| Born in Norway, 2 immigrant parents | 1.8020*** | [1.6597, 1.9565] |
| | 0.8885* | [0.7879, 1.0020] |
| Born outside Norway 1 Norwegian parent | | |
| Born in Norway, 1 immigrant parent | 1.0649** | [1.0088, 1.1242] |
| Born outside Norway of Norwegian parents | 0.9351 | [0.8343, 1.0480] |
| Number of Observations | | 1 934 248 |
| Number of individuals | | 279 531 |
| Average number of observations. pr. individual: | | 6.9 |

* p<.10, ** p<.05, *** p<.01

APPENDIX Table 2:

The estimated impact of duration of residence among individuals with different birth countries, on the probability of seeking care at the EW. Results from random effects logistic regression. Results from random effects logistic regression when running univariate regression on each independent variable separately. (Estimates of constant terms suppressed for ease of exposition)

| Independent variables | OR | [95 % C.I.] |
|---|-----------|-----------------|
| Age. (Reference category age<25) | | |
| Age group 25-29 | 1.4557*** | [1.3765,1.5394] |
| Age group 30-34 | 1.1366*** | [1.0748,1.2019] |
| Age group 35-39 | 0.9919 | [0.9359,1.0512] |
| Age group 40-44 | 0.9198*** | [0.8643,0.9788] |
| Age group 45-49 | 0.7610*** | [0.7089,0.8170] |
| Age group 50-54 | 0.6373*** | [0.5853,0.6939] |
| Age group 55-59 | 0.5170*** | [0.4675,0.5719] |
| Age group 60-64 | 0.5484*** | [0.4860,0.6189] |
| Age group 65-69 | 0.5841*** | [0.5012,0.6808] |
| Age group 70-74 | 0.6977*** | [0.5807,0.8381] |
| Age group 75-79 | 0.8506 | [0.6982,1.0361] |
| Age group 80-84 | 0.9125 | [0.7251,1.1483] |
| Age group 85-89 | 1.3927** | [1.0084,1.9235] |
| Age group 90 or older | 4.3260*** | [2.4308,7.6987] |
| Yearly visits | 0.9558*** | [0.9523,0.9593] |
| Gender | 0.7791*** | [0.7457,0.8140] |

| | | |
|-------------------------------|-----------|------------------------|
| Female*Sweden*duration | 1.0000 | [1.0000,1.0000] |
| Female*Denmark*stay | 1.0000*** | [1.0000,1.0000] |
| Female*Poland*stay | 1.0000 | [1.0000,1.0000] |
| Female*Iraq*duration | 1.0001 | [1.0000,1.0001] |
| Female*Germany*duration | 1.0000*** | [1.0000,1.0000] |
| Female*Bosnia*duration | 1.0000 | [1.0000,1.0000] |
| Female*Somalia*duration | 1.0001*** | [1.0001,1.0002] |
| Female*Pakistan*duration | 1.0000** | [1.0000,1.0000] |
| Female*Vietnam*duration | 0.9999*** | [0.9999,1.0000] |
| Female*Russia*duration | 1.0000* | [1.0000,1.0000] |
| Female*Iran*duration | 1.0000** | [0.9999,1.0000] |
| Female*Great Britain*duration | 1.0000 | [1.0000,1.0000] |
| Female*Turkey*duration | 1.0000** | [1.0000,1.0000] |
| Female*Sri Lanka*duration | 1.0000** | [0.9999,1.0000] |
| Female*other migrant*duration | 1.0000*** | [1.0000,1.0000] |
| Sweden | 1.0746 | [0.9842,1.1733] |
| Denmark | 0.7056*** | [0.6148,0.8098] |
| Poland | 1.1100 | [0.9660,1.2756] |
| Iraq | 1.2545*** | [1.1279,1.3952] |
| Germany | 0.6114*** | [0.5071,0.7371] |
| Bosnia | 0.9655 | [0.8354,1.1159] |
| Somalia | 1.9304*** | [1.7716,2.1034] |
| Pakistan | 0.9652 | [0.9055,1.0288] |
| Vietnam | 0.5730*** | [0.5007,0.6557] |
| Russia | 0.8113** | [0.6664,0.9876] |
| Iran | 0.9525 | [0.8605,1.0544] |
| Great Britain | 0.6693*** | [0.5511,0.8129] |

| | | |
|--|-----------|-----------------|
| Turkey | 1.0211 | [0.9127,1.1424] |
| Sri Lanka | 1.0454 | [0.9548,1.1446] |
| Sweden*duration | 0.9843*** | [0.9785,0.9902] |
| Denmark*duration | 0.9899*** | [0.9853,0.9945] |
| Poland*duration | 0.9880*** | [0.9797,0.9963] |
| Irak*duration | 1.0131** | [1.0012,1.0251] |
| Germany*duration | 0.9816*** | [0.9739,0.9893] |
| Bosnia*duration | 0.9925 | [0.9818,1.0032] |
| Somalia*duration | 1.0576*** | [1.0490,1.0663] |
| Pakistan*duration | 0.9949*** | [0.9917,0.9981] |
| Vietnam*duration | 0.9669*** | [0.9595,0.9743] |
| Russia*duration | 0.9891 | [0.9708,1.0078] |
| Iran*duration | 0.9945 | [0.9874,1.0017] |
| Great Britain*duration | 0.9818*** | [0.9742,0.9895] |
| Turkey*duration | 0.9940* | [0.9875,1.0006] |
| Sri Lanka*duration | 0.9987 | [0.9925,1.0049] |
| Other migrant*duration | 0.9871*** | [0.9847,0.9894] |
| Duration^2 | 0.9997*** | [0.9996,0.9997] |
| <hr/> | | |
| Number of observations | 387 927 | |
| <hr/> | | |
| Number of unique individuals | 51 771 | |
| <hr/> | | |
| Average nr. of observations per individual | 7.5 | |
| <hr/> | | |
| * p<.10, ** p<.05, *** p<.01 | | |

10. APPENCICES

10.1 Article in UTPOSTEN

20

Informasjon om fastlegeordningen til flerkulturelle befolkningsgrupper – en utfordring for helsevesenet

AV URSULA G. S. GOTH

Mange nyankomne innvandrere har problemer med å orientere seg i det norske helsesystemet og kjenner ikke sine pasientrettigheter godt nok. Økt forbruk av legevakttjenester i denne gruppen kan indikere mangelfull informasjon om fastlegeordningen. Vi presenterer her resultatene av en nylig gjennomført studie for å belyse denne problemstillingen.

Introduksjon

Innvandring har de siste 50 årene skapt et stadig økende kulturelt mangfold. Dette kan medføre store utfordringer – spesielt for det norske helsevesenet (1).

Men det er ikke bare for helsevesenet det blir omstilling. Nyankomne innvandrere opplever en utfordring ved å forholde seg til et system som kan være svært ulikt det de kjenner fra hjemlandet. I tillegg opplever mange omfattende endringer i andre grunnleggende forhold som familiestruktur og sosialt nettverk.

En av konsekvensene ved å leve i et nytt miljø er at forekomsten og hyppigheten av sykdommer kan endres og at begge har en tendens til å øke. Også evnen til å forstå den nye situasjonen og motta informasjon kan bli redusert (2,3).

Kompleksiteten i vestlige helsesystem er økende og det viser seg at for eksempel «fastlegeordningen» kan være vanskelig å forstå, selv for landets egne innbyggere (4). Noen innvandrere forstår kun sitt eget morsmål. Det er viktig at også disse mottar informasjon om fastlegeordningen og hva denne innebærer. Mangel på denne kunnskapen kan medføre en betydelig feilbruk av helsetjenester og for eksempel et annet forhold til timeavtaler enn det som er



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vanlig i Norge. Dermed risikerer man at disse pasienter hovedsakelig forholder seg til legevakten og/eller går til mange forskjellige leger.

Beskrivelse av problemet

For at den enkelte skal ha mulighet til å bruke helsetjenesten må man som et minimum vite hvor og når en skal henvende seg. Dette forutsetter at informasjonen fra helsemyndighetene blir mottatt og forstått av alle brukergruppene.

I samfunn der alle innbyggerne ikke er like godt integrerte, må helsevesenet ofte finne nye informasjonskanaler for å sikre at informasjonen når frem til alle enkeltindivider.

Integrering av ulike kategorier innvandrere i et nytt miljø krever ofte at det tas i bruk fleksible strategier tilpasset de ulike gruppene. Hvilken type informasjon som er nødvendig kan variere sterkt mellom gruppene. Det er i tillegg en særlig utfordring å formidle informasjon til personer som ikke er lese- og skrivekyndige.

Situasjonen i Norge

Formålet med fastlegeordningen, som ble introdusert i 2001, er at alle innbyggere skal ha sin personlige allmennlege å forholde seg til. Fastlegen skal også fungere som inngangsport for sine pasienter til helsetjenester på ulike nivå. All tilgang til ikke-akutt behandling hos spesialister kanaliseres gjennom fastlegen, noe som kan være overraskende for mange innvandrere, også de fra andre vestlige land.



ILLUSTRASJON: ALEXANDER RANG

I Norge ser vi en økende bruk av helsetjenester hos enkelte innvandrergupper (3). Dette kan indikere at innvandrere har større medisinske behov, men det kan også bety at den behandlingen de mottar ikke blir opplevd som tilfredsstillende og dermed fører til økt pågang (økt antall konsultasjoner) (3).

I 2009 hadde vi ennå ikke tilstrekkelig dokumentasjon på hvordan ulike innvandrerguppene bruker helsetjenesten, heller ikke for landets største innvandrergupper fra Polen, Sverige, Tyskland og Russland. De fleste undersøkelsene hadde vært avgrenset til en del «ikke-vestlige» grupper som pakistane, vietnamesere, somaliere og chilenerne (2,3).

Innvandrere som har vært inkludert i norske studier har bodd i landet i mer enn fem år. Noen av spørrelistene som ble brukt i disse omfattende undersøkelsene er på norsk, noe en har gått ut fra at informantene forstår.

Tidligere publikasjoner antyder at 77 prosent av konsultasjonene ved norske legevakter blir kategorisert som

ikke-akutte (6) og at innvandrernes bruk av offentlige helsetjenester er større enn majoritetsbefolkningens (2, 3).

På NAVs og HELFOs hjemmeside er det svært begrenset informasjon om fastlegeordningen på andre språk enn norsk. Legevaktene som gjerne kontaktes ved akutt behov for primærlege har i dag ikke som oppgave å informere pasientene om det norske helsesystemet generelt og fastlegeordningen spesielt.

Behov for informasjon – mulighet til å øke effektiviteten i den offentlige helsetjenesten

Forskjellige innvandrergupper har gjerne forskjellige nettverksgrupper.

Her ønsker jeg å vise til M. Castells som sa «One of the key features of the information-society is the networking logic of its basic structure, which explains the use of the concept

of «networking society» (5). Her vil den enkeltes interaksjonsmønster være preget av sitt lokale nettverk. Vi kan ikke ta det for gitt at immigranter vil forstå et ukjent system uten en tilrettelagt og grundig innføring.

I følge tidligere nordiske studier kan økende bruk av legevakt være et av tegnene på ineffektiv bruk av offentlige helsetjenester (6,7). En viktig årsak kan være at pasientene rett og slett ikke forstår systemet.

Mål og metode

Målet med studien er å skaffe informasjon om mulige hindringer som immigranter opplever i tilgang til og i møte med det offentlige helsesystemet. Studien består av en kvalitativ og en kvantitativ del.

Den kvalitative delen inkluderte intervjuer med fastleger med kontor i Osloregionen og nøkkelinformanter fra de 13 største immigrantgruppene i Norge. Disse gruppene bidro med informasjon fra to ulike ststeder. Lederne for innvandrersorganisasjonene ble intervjuet om hvordan de oppfattet sine landsmenns erfaringer med det norske helsevesenet. Fastlegene ble intervjuet om sine erfaringer med innvandrerpasienter. I intervjuene spurte vi om interaksjonsmønsteret mellom lege og pasient, om kompliserende faktorer som ulikt språk og om hvilke forventninger legen og innvandrerpasientene hadde. Intervjuene ble gjennomført på norsk ved bruk av en semistrukturert intervjuguide. Resultatene ble analysert, validert og oppsummert av to forskere. I den kvantitative delen sammenlignes egenrapporterte data fra innvandrere med registerdata fra de 13 største migrasjonsgruppene.

Det brukes data fra flere ulike offentlige kilder som dekker den oppgitte og den faktiske bruken av primærhelsetjenester, både for innvandrerpasienter og av norskfødte pasienter. Materialet er hentet fra flere offentlige databaser.

Foreløpige funn

De foreløpige resultatene fra intervjuene med fastleger indikerer at fastlegene opplever at nyankomne innvandrere kan reagere med hjelpeløshet. Pasientenes mangel på informasjon om det norske helsesystemet kan være en forklarende faktor.

Foreløpig resultat fra intervjuene med innvandrerepresentantene tyder på at tilgjengelig informasjon om det norske helsesystemet ikke når frem til visse innvandrergreper. Det antas at dette kan være til hinder for samhandling med, og tilpasning til, det norske helsesystemet.

Informasjon om tildelt fastlege til den enkelte, sendt fra sentralt hold, er på norsk. Informasjon til flyktninger og asylsøkere er planlagt å bli gitt under oppholdet på asylmottaket. Av intervjuene fremgår det at nyankomne innvandrere, som for eksempel arbeidsinnvandrere, sjelden har tilstrekkelig tilgang til forståelig informasjon tilpasset deres behov.

Familie, venner, innvandrersorganisasjoner, arbeidskolleger og religiøse fellesskap ble nevnt som hovedkildene til informasjon. Dette inkluderer også informasjon om helsesystemet til nyankomne.

Både fastlegene og innvandrerepresentantene uttrykte at det er behov for oversettelse av informasjonsmateriale og tilgang til tolk under konsultasjoner. Mangel på en felles forståelsesplattform medfører at fastlegen kan få en ufullstendig forståelse av pasientens helseproblem.

De foreløpige resultatene fra intervjuene viser at de nyankomne innvandrerne i de 13 største innvandrergreper er mer tilbøyelig til å oppsøke legevakt enn til å oppsøke tildelt fastlege og at innvandreres bruk av fastlegeordningen er positivt sammenfallende med lengden på deres opphold i Norge, deres kunnskaper i norsk eller engelsk, samt med deres utdanningsnivå. Årsaken til migrasjonen gjenspeiler seg som oftest i bruksmønsteret. For eksempel vil innvandrere som kommer grunnet familiegjenforening motta informasjon fra nærstående slektninger mens nyankomne arbeidsinnvandrere ikke har slike ressurser tilgjengelig.

Konklusjon

Vi mangler kunnskap om i hvilken utstrekning informasjon om helsesystemet når frem til nyankomne arbeidsinnvandrere. Dersom informasjonen ble tilgjengelig i et format som disse kan forstå, ville vi sannsynligvis kunne se en reduksjon i feil bruk av medisinske konsultasjoner.

Da de ulike innvandrergreper har ulike strategier for å tilegne seg informasjon, må både selve informasjonen og måten den distribueres på tilpasses de aktuelle gruppene.

For å kunne håndtere en situasjon hvor pasienter har ulik kulturell bakgrunn – våre nye «helsetjenestekonsumenter» – må også det norske helsesystemet tilpasse seg.

Formidling av informasjon om helsetilbud og helsesystem på innvandrernes eget språk ved ankomsten til Norge synes å ha betydning, men de mange ulike språk som i dag snakkes av innvandrere gjør dette til en stor utfordring for helsevesenet.

Innvandrerrepresentanter og innvandrere organisasjoner kan være hjelpelige med å spre viktig informasjon tilpassede sine grupper. Ved systematisk å informere representanter og organisasjoner om endringer og viktige nyheter kan innvandrerne få forståelig og kulturelt tilpasset informasjon. I noen byer som for eksempel Oslo finnes det et kommunalt råd for innvandrere organisasjoner som kan være hjelpelig med dette.

Både økning av antall innvandrere og innvandrergreper medfører at helsesystemer må legge tilrette for tilpassede likeverdige helsetjenester og kommende behov. Kulturelt tilpassede informasjonskanaler vil være en av mulighetene for å lykkes med dette.

Videreutvikling av fastlegeordningen vil være avhengig av den rette kombinasjonen av direkte og indirekte intervensjon.

For å ivareta grunnprinsippet om likeverdige helsetjenester, bør det bli mulig for den enkelte innvandrer å finne frem til de rette informasjonskanalene. Dette kan medføre en forbedret bruk av tilbudene i primærhelsetjenesten.

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Evt. spørsmål og kommentarer kan rettes til:
ursula.goth@gmail.com

10.3 Literature search I, II and III

Søkestrategi

Dato: 01.09.09

Søket gjentatt 05.05.11

Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) - 1948 to Present

Søk 1

- 1 Scandinavia/ or Norway/ or Sweden/ or Denmark/
- 2 Physicians, Family/
- 3 Gatekeeping/
- 4 General Practice/ or Family Practice/
- 5 General Practitioners/
- 6 gp scheme*.tw.
- 7 gp list*.tw.
- 8 (practitioner* adj2 list*).tw.
- 9 (practitioner* adj2 scheme*).tw.
- 10 (list* adj2 patient*).tw.
- 11 regular general practitioner*.tw.
- 12 rgp*.tw.
- 13 After-hours-care/
- 14 1 and (or/2-5) and (or/6-13)
- 15 limit 14 to yr="1999 -Current"

+primary health care

Søk 2

- 1 *Physicians, Family/
- 2 *Gatekeeping/
- 3 *general practice/ or *family practice/
- 4 *General Practitioners/
- 5 *"Transients and Migrants"/
- 6 exp *Ethnic Groups/
- 7 *refugees/
- 8 *"Emigration and Immigration"/
- 9 *"Emigrants and Immigrants"/
- 10 *Minority Groups/
- 11 *minority health/
- 12 (or/1-4) and (or/5-11)

+primary health care

13 scandinavia/ or Norway/ or Sweden/ or Denmark/
14 Netherlands/
15 Canada/
16 exp Great Britain/
17 Physicians, Family/
18 Gatekeeping/
19 General practice/ or Family practice/
20 General Practitioners/
21 gp scheme*.tw.
22 gp list*.tw.
23 (practitioner* adj2 list*).tw.
24 (practitioner* adj2 scheme*).tw.
25 (list* adj2 patient*).tw.
26 "Transients and Migrants"/
27 exp Ethnic Groups/
28 Refugees/
29 "Emigration and Immigration"/
30 "Emigrants and Immigrants"/
31 Minority Groups/
32 Minority health/
33 (or/13-17) and (or/19-26) and (or/27-33)
34 12 or 33
35 limit 34 to yr="2008 -Current"
36 limit 35 to (danish or dutch or english or french or german or norwegian or
swedish)

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OvidSP

| | |
|---------------------------|-------------------|
| Current Search Results | Main Search Page |
| Spør Medisinsk bibliotek! | Display Knowledge |
| Base | Help |
| | Logoff |

Current Search History

Ovid MEDLINE(R) 1950 to November Week 3 2008

| # | Searches | Results | Search Type |
|----|--|---------|-------------|
| 1 | *physicians, family/ | 8252 | Advanced |
| 2 | *Family Practice/ | 35176 | Advanced |
| 3 | exp *Ethnic Groups/ | 42997 | Advanced |
| 4 | *Refugees/ | 4221 | Advanced |
| 5 | *"Emigration and Immigration"/ | 12525 | Advanced |
| 6 | *"Transients and Migrants"/ | 4506 | Advanced |
| 7 | *"Emigrants and Immigrants"/ | 474 | Advanced |
| 8 | *Minority Health/ | 23 | Advanced |
| 9 | *Minority Groups/ | 4343 | Advanced |
| 10 | norway/ | 31287 | Advanced |
| 11 | denmark/ | 30318 | Advanced |
| 12 | Netherlands/ | 36153 | Advanced |
| 13 | canada/ | 56243 | Advanced |
| 14 | exp Great Britain/ | 246632 | Advanced |
| 15 | scandinavia/ or denmark/ or norway/ or sweden/ | 109082 | Advanced |
| 16 | Physicians, Family/ | 12736 | Advanced |
| 17 | Family Practice/ | 56794 | Advanced |
| 18 | exp Ethnic Groups/ | 82102 | Advanced |
| 19 | Refugees/ | 5323 | Advanced |
| 20 | "Emigration and Immigration"/ | 20963 | Advanced |
| 21 | "Transients and Migrants"/ | 6716 | Advanced |
| 22 | "Emigrants and Immigrants"/ | 724 | Advanced |
| 23 | Minority Health/ | 40 | Advanced |
| 24 | Minority Groups/ | 7701 | Advanced |
| 25 | (1 or 2) and (3 or 4 or 5 or 6 or 7 or 8 or 9) | 220 | Advanced |
| 26 | 10 or 11 or 12 or 13 or 14 or 15 | 441154 | Advanced |
| 27 | (16 or 17) and (18 or 19 or 20 or 21 or 22 or 23 or 24) and 26 | 243 | Advanced |
| 28 | 27 or 25 | 369 | Advanced |
| 29 | limit 28 to (danish or dutch or english or french or german or norwegian or swedish) | 367 | Advanced |
| 30 | limit 29 to yr="1990 - 2009" | 278 | Advanced |

Side 1.

Side 2
side 17.2

SveMed+ - Kombinerar tidigare sökningar

Här utnyttjar du sökhistoriken för att kombinera sökningar som du gjort tidigare under söksessionen.

1977-

Sökhistorik:

| Sökmängd | Sökvillkor | Antal poster |
|------------|---|--------------|
| <u>S1</u> | Explodesökning på Physicians,-Family | 1102 |
| <u>S2</u> | Explodesökning på Family-Practice | 2307 |
| <u>S3</u> | Explodesökning på Ethnic-Groups | 238 |
| <u>S4</u> | Explodesökning på Refugees | 458 |
| <u>S5</u> | Explodesökning på Emigration-and Immigration | 813 |
| <u>S6</u> | Explodesökning på Emigrants-and Immigrants | 31 |
| <u>S7</u> | Explodesökning på Transients-and Migrants | 18 |
| <u>S8</u> | Explodesökning på Minority-Health | 1 |
| <u>S9</u> | Explodesökning på Minority-Groups | 51 |
| <u>S10</u> | (s1 or s2) and (s3 or s4 or s5 or s6 or s7 or s8 or s9) | 25 |



Cinahl
1997 - 2009

Thursday, January 15, 2009 1:23:42 PM

| # | Query | Limiters/Expanders | Last Run Via | Results |
|----|---|----------------------------------|---|---------|
| S9 | (S8 or S7 or S6 or S5 or S4 or S3) and (S2 or S1) | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 44 |
| S8 | (MM "Transients and Migrants") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 609 |
| S7 | (MM "Minority Groups") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 2376 |
| S6 | (MM "Immigrants") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 1916 |
| S5 | (MM "Emigration and Immigration") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 1129 |
| S4 | (MM "Refugees") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 1394 |
| S3 | (MM "Ethnic Groups+") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 20081 |
| S2 | (MM "Family Practice") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 3796 |
| S1 | (MM "Physicians, Family") | Search modes - Boolean/Phrase | Interface - EBSCOhost Search Screen - Advanced Search Database - CINAHL | 2299 |

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Current Search History

PsycINFO 1987 to January Week 2 2009

| # | Searches | Results | Search Type |
|---|---|---------|-------------|
| 1 | family medicine/ or family physicians/ or general practitioners/ | 3995 | Advanced |
| 2 | exp "racial and ethnic groups"/ | 48733 | Advanced |
| 3 | minority groups/ | 5812 | Advanced |
| 4 | immigration/ | 6536 | Advanced |
| 5 | human migration/ or refugees/ | 3875 | Advanced |
| 6 | 1 and (2 or 3 or 4 or 5) | 74 | Advanced |
| 7 | limit 6 to (danish or dutch or english or french or german or norwegian or swedish) | 74 | Advanced |

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BIBSYS ASK

Modul for "Spesialsøk"

Søk 1

fastlege? or fastlæge or husläkar or listepasient? or pasientlist? or legevakt? or lægevag?
or gatekeep? or legevakt? or lægevagt? or (gp and scheme?) or (practitioner? and
scheme?) or (patient and list?) or (regular and general and practitioner?)

Limit: 1999-2011

Søk 2

(innvand? or indvand? or immigr? or asylsøk? or migrant? or flyktn? or refuge? or
minorit? or ikkevest? or ikke-vest? or fremmedkult? or tverrkult? or
ethnic? or etnisk? or flerkult? or transcult? or transkult? or crosscult? or (cross and cult?)
or cross-cult?)

and

(allmennleg? or primærleg? or allmennhelse? or famileleg? or (general and practi?) or
physician? or lege or leger or legens or legene or läkar? or læger or doctor? or (primary
and health) or førstelinjetj? or primærhelsetj? or primærleg? or allmennmød? or helsetj?)

Limit: 1999-2011

SveMed+

S1 fastlege\$
S2 fastlaege\$
S3 husläkar\$
S4 listepasient\$
S5 listepatient\$
S6 pasientliste\$
S7 patientliste\$
S8 Explodesökning på Gatekeeping
S9 Explodesökning på After-Hours-Care
S10 laegevagt\$
S11 legevakt\$
S10 s1 or s2 or s3 or s4 or s5 or s6 or s7 or s8 or s9 or s10 or s11
S 11 Limit to 1999 – 2011

26.01.2011

BIBSYS

Delbase Spesialsøk:

helsekomp? eller h lsokomp? eller (health og literacy)

73 treff

NORART

helsekomp? or h lsokomp? or (health and literacy)

MEDLINE

Ovid MEDLINE(R) 1948 to January Week 3 2011

| # | Searches | Results | Search Type |
|----|---|---------|-------------|
| 1 | health literacy.tw. | 1116 | Advanced |
| 2 | health literacy/ | 253 | Advanced |
| 3 | 1 or 2 | 1198 | Advanced |
| 4 | exp Scandinavia/ | 106790 | Advanced |
| 5 | (norway or norwegian or swed* or danish or denmark).tw. | 79727 | Advanced |
| 6 | 4 or 5 | 138483 | Advanced |
| 7 | exp Ethnic Groups/ | 88756 | Advanced |
| 8 | Refugees/ | 5642 | Advanced |
| 9 | "Emigration and Immigration"/ | 20988 | Advanced |
| 10 | "Transients and Migrants"/ | 7064 | Advanced |
| 11 | "Emigrants and Immigrants"/ | 2457 | Advanced |
| 12 | Minority Health/ | 158 | Advanced |
| 13 | Minority Groups/ | 8442 | Advanced |
| 14 | cross-cultural comparison/ | 17977 | Advanced |
| 15 | or/7-14 | 135212 | Advanced |
| 16 | 3 and 6 and 15 | 0 | Advanced |

BIBSYS

Delbase Spesialsøk:

helsekomp? eller h lsokomp? eller (health og literacy)

73 treff

NORART

helsekomp? or h lsokomp? or (health and literacy)

MEDLINE

Ovid MEDLINE(R) 1948 to January Week 3 2011

| # | Searches | Results | Search Type |
|----|---|---------|-------------|
| 1 | health literacy.tw. | 1116 | Advanced |
| 2 | health literacy/ | 253 | Advanced |
| 3 | 1 or 2 | 1198 | Advanced |
| 4 | exp Scandinavia/ | 106790 | Advanced |
| 5 | (norway or norwegian or swed* or danish or denmark).tw. | 79727 | Advanced |
| 6 | 4 or 5 | 138483 | Advanced |
| 7 | exp Ethnic Groups/ | 88756 | Advanced |
| 8 | Refugees/ | 5642 | Advanced |
| 9 | "Emigration and Immigration"/ | 20988 | Advanced |
| 10 | "Transients and Migrants"/ | 7064 | Advanced |
| 11 | "Emigrants and Immigrants"/ | 2457 | Advanced |
| 12 | Minority Health/ | 158 | Advanced |
| 13 | Minority Groups/ | 8442 | Advanced |
| 14 | cross-cultural comparison/ | 17977 | Advanced |
| 15 | or/7-14 | 135212 | Advanced |
| 16 | 3 and 6 and 15 | 0 | Advanced |

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Ovid MEDLINE(R) 1948 to January Week 3 2011

| # | Searches | Results | Search Type |
|----|--|---------|-------------|
| 1 | health literacy.tw. | 1116 | Advanced |
| 2 | health literacy/ | 253 | Advanced |
| 3 | 1 or 2 | 1188 | Advanced |
| 4 | exp Scandinavia/ | 106790 | Advanced |
| 5 | (norway or norwegian or sweden or danish or denmark).tw. | 79727 | Advanced |
| 6 | 4 or 5 | 138483 | Advanced |
| 7 | exp Ethnic Groups/ | 88756 | Advanced |
| 8 | Refugees/ | 5642 | Advanced |
| 9 | "Emigration and Immigration"/ | 20988 | Advanced |
| 10 | "Transients and Migrants"/ | 7064 | Advanced |
| 11 | "Emigrants and Immigrants"/ | 2457 | Advanced |
| 12 | Minority Health/ | 158 | Advanced |
| 13 | Minority Groups/ | 8442 | Advanced |
| 14 | cross-cultural comparison/ | 17977 | Advanced |
| 15 | or/7-14 | 135212 | Advanced |
| 16 | 3 and 6 and 15 | 0 | Advanced |

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Wolters Kluwer
Health

OvidSP

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Ovid MEDLINE(R) 1946 to April Week 3 2011

| # | Searches | Results | Search Type |
|----|--|---------|-------------|
| 1 | scandinavia/ or norway/ or sweden/ or denmark/ | 108985 | Advanced |
| 2 | Physicians, Family/ | 13945 | Advanced |
| 3 | Gatekeeping/ | 456 | Advanced |
| 4 | general practice/ or family practice/ | 57791 | Advanced |
| 5 | General Practitioners/ | 194 | Advanced |
| 6 | gp scheme*.tw. | 5 | Advanced |
| 7 | gp list*.tw. | 25 | Advanced |
| 8 | (practitioner* adj2 list*).tw. | 135 | Advanced |
| 9 | (practitioner* adj2 scheme*).tw. | 37 | Advanced |
| 10 | (list* adj2 patient*).tw. | 2227 | Advanced |
| 11 | 1 and (or/2-5) and (or/6-10) | 79 | Advanced |
| 12 | limit 11 to yr=1999 -Current* | 64 | Advanced |
| 13 | from 12 keep 3, 5-8, 13-18, 20-22, 25, 27... | 31 | Advanced |

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Search Results

Ovid MEDLINE(R) 1950 to April Week 3 2010

| # | Searches | Results |
|----|--|---------|
| 1 | *cross-cultural comparison/ | 8260 |
| 2 | exp *Ethnic Groups/ | 45885 |
| 3 | *Refugees/ | 4389 |
| 4 | *"Emigration and Immigration"/ | 12414 |
| 5 | *"Transients and Migrants"/ | 4657 |
| 6 | *"Emigrants and Immigrants"/ | 1202 |
| 7 | *Minority Health/ | 63 |
| 8 | *Minority Groups/ | 4647 |
| 9 | residenc\$.tw. | 33949 |
| 10 | dwelling\$.tw. | 11054 |
| 11 | length of stay.tw. | 17084 |
| 12 | or/1-8 | 74185 |
| 13 | 9 or 10 or 11 | 61581 |
| 14 | 12 and 13 | 1935 |
| 15 | "referral and consultation"/ or gatekeeping/ | 43555 |
| 16 | 14 and 15 | 14 |
| 17 | from 16 keep 4-5 | 2 |
| 18 | (significan\$ or quantitat\$).tw. | 3040763 |
| 19 | (general pract\$ or gp\$).tw. | 123369 |
| 20 | 12 and 15 and 18 and 19 | 10 |
| 21 | from 20 keep 1-3, 5-6, 9-10 | 7 |
| 22 | 14 and 19 | 12 |
| 23 | 22 not 20 | 12 |
| 24 | from 23 keep 1-12 | 12 |
| 25 | from 24 keep 5, 10 | 2 |
| 26 | from 25 keep 1-2 | 2 |

Results of your search: from 25 [from 24 keep 5, 10] keep 1-2

Results Available: 2

Results Displayed: 1-2

Result 1.

Unique Identifier 15819728

Status MEDLINE

<http://ovidsp.tx.ovid.com/sp-2.3.1b/ovidweb.cgi>

30.04.2010

10.4 Request, informed consent and questionnaire for general practitioners

Forespørsel om å delta i en vitenskapelig undersøkelse

NAKMI (Norsk kompetanseenhet for minoritetshelse) ønsker å gjennomføre en studie blant immigranter og deres stedfortredere. Målet med studiet er å undersøke legens forhold til innvandrerpasienter og immigrantenes forhold til fastlegen i hht. Fastlegeordningen. Noen har positive opplevelser mens andre opplever utfordringene med ordningen.

Vi ønsker å gjennomføre denne undersøkelsen for å kunne belyse eventuelle utfordringene med Fastlegeordningen.

Framgangsmåte

Utvalgte leger og representanter fra innvandrerorganisasjoner som er over 18 vil bli spurt om å delta i undersøkelsen. Intervjuet vil bli gjennomført uten tolk og varer i ca. 20 min.

Godkjenninger

Den Regionale komiteen for medisinsk forskningsetikk, Region Sør-Øst og Personvernrådgiiver for Ullevål universitetssykehus har godkjent undersøkelsen.

Frivillighet

Alle som deltar i undersøkelsen skal gjøre dette frivillig, og man har full frihet til å trekke seg fra undersøkelsen uten at dette får noen uønskede konsekvenser.

Taushetsplikt

Når vi skriver om resultatene av denne undersøkelsen, vil dette ikke være mulig å gjenkjenne enkeltpersoner ut fra beskrivelser av resultatene. Ingen personidentifiserbare opplysninger skal benyttes. Materialet er beskyttet av vanlig taushetsplikt, og alle opplysninger er anonymiserte ved prosjektets avslutning.

Hvis det er spørsmål du lurer på, kan du spørre prosjektmedarbeideren som er tilstede.

Med vennlig hilsen

Prosjektleder
Karin H. Hjelde
Forsker
NAKMI, Ullevål universitetssykehus
Tel. 23 01 60 63

Prosjektmedarbeider
Ursula-Georgine Goth
Dr.gradsstudent
NAKMI, Ullevål universitetssykehus
Tel. 95965969

Forespørsel om deltakelse i forskningsprosjektet

"Hva skiller innvandrere og norskfødte personer ved bruk av Fastlegeordningen"

Bakgrunn og hensikt

Dette er et spørsmål til deg om å delta i en forskningsstudie for å undersøke om 1.generasjonsinnvandrere bruker Fastlegeordningen på samme måte som resten av befolkningen. Du som fastlege ble valgt ut til å forespørres grunnet din erfaring med innvandrerpasienter.

Hva innebærer studien?

Studien består av 3 deler som ønsker å belyse problemstillinger fra både pasientens og legens ståsted. Prosjektets mål er å kartlegge bruk av Fastlegeordningen hos 1.generasjonsinnvandrere i forhold til norskfødte pasienter og undersøke mulige systematiske forskjeller. Et annet mål er å undersøke hvordan samhandlingen mellom fastlegen og førstegenerasjonspasienter oppfattes av begge parter. Et delmål er å kartlegge faktorer som kan belyse om ordningen fungerer etter intensjonene. I delen der legeintervjuene inngår vil du bli intervjuet ihht. et intervju skjema. Dersom du aksepterer å bli inkludert i studien vil svarene registreres på en måte at de ikke kan identifisere deg.

Mulige fordeler og ulemper

Intervjuet vil verken medføre fordeler eller ulemper

Hva skjer med intervjuvarene og informasjonen om deg?

Dine svar vil være anonymisert, skrevet ned under samtalen og deretter oppbevart i et låst arkivskap.

Etter publisasjon av den anonymiserte forskningsrapporten vil alle notater bli destruert.

Intervjuvarene som registreres skal kun brukes slik som beskrevet i hensikten med studien. Det vil ikke bli registrert personlige opplysninger eller andre direkte gjenkjennende opplysninger om deg. Det vil ikke være mulig å identifisere deg i resultatene av studien når disse publiseres.

Frivillig deltakelse

Det er frivillig å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Dersom du ønsker å trekke deg må dette gjøres under selve intervjuet da det ikke vil være mulig å spore dine data tilbake. Dersom du har noen spm. til studien vennligst ta kontakt med Ursula Goth på tel. 95965969.

Ytterligere informasjon om studien finnes i kapittel A – utdypende forklaring av hva studien innebærer.

Ytterligere informasjon om personvern og forsikring finnes i kapittel B – Personvern, økonomi og forsikring.

Samtykkeerklæring følger etter kapittel B.

Kapittel A- utdypende forklaring av hva studien innebærer

- Bakgrunnsinformasjon om studien

Det er særlig konsekvensene for innvandrere av å falle utenfor "fastlegeordningen" som er grunnen til å initiere dette prosjektet. I NOU 2005:3 nevnes det at evalueringen av fastlegeordningen bare i begrenset grad har gitt kunnskap om hvordan fastlegeordningen fungerer for "spesielle grupper". I evalueringen går det også frem at pasienter med innvandrerbakgrunn kan oppleves av fastlegen å være "tyngre" enn andre grupper, og at de dermed lett kan oppfattes som en pasientgruppe som er lite lønnsom. Problemene er særlig knyttet til å forstå behandlingen, urealistiske forventninger, kommunikasjons-vansker og inadekvat oppfølging. Folkehelseinstituttet viser til at flere grupper av ikke-vestlige innvandrere er spesielt utsatt for livsstilssykdommer og er overrepresentert både i forhold til risikofaktorer og sykdomshyppighet. I Tidsskrift for Den norske legeforening (Hauff, 2008) understrekes denne problematikken og de tilpasningsutfordringene som migrasjon medfører for samfunnet. I følge HUBRO undersøkelsen benytter befolkningen i de østlige bydelene i Oslo allmennlegevakten mer enn befolkningen i de vestlige bydelene gjør. Innvandrere i Oslo brukte allmennlegevakt mer enn personer med norsk bakgrunn. Situasjonen blir også lagt merke til i andre deler av primærhelsetjenesten som på Legevakten i Oslo, der pasienter med minoritetsbakgrunn er overrepresentert. Pasienter er som oftest registrert med fastlege i systemet, men er likevel nokså ukjent med fastlegeordningen. Dette kan få medisinske konsekvenser da legevakten bare tilbyr øyeblikkelig hjelp og ikke har som oppgave å forebygge eller følge opp sykdomstilstander hos den enkelte. Disse forholdene vanskeliggjør en samordnet behandling av innvandrerpasienter med preg av kontinuitet, god utnyttelse av ressursene, trygge og sikre medisinske oppfølgingsrutiner til den enkelte og et helsesystem som fremmer helhet

Metodisk er studien i 3 deler. Del 1 er kvantitativ og inkluderer opprettelsen av en landsdekkende database med grensesnitt til NAVs registrerte data og Personregisteret for 1. generasjonsinnvandrere over 18 år. Dataene analyseres ved hjelp av SPSS. Del 2 baserer seg på kvalitative metoder. Ved hjelp av intervjuguide vil informasjon fra fastleger og representanter fra de største innvandrergrupper samles inn og klassifiseres og analyseres. Del 3 er en komparativ og kvalitativ studie med kvantitative suppleringer hvor 400 pasienter, fordelt på to ulike legevakter vil delta. Den kvalitative delen vil starte med å undersøke svar på individuelle spørsmål. Deretter identifiseres tema gjennom enkle innholdsanalyser. Resultatene fra den kvantitative delen behandles som i del 1.

- Tidsskjema

Intervju med fastlegene vil foregå i løpet av 2008 og 2009

- Mulige fordeler/ulempes eller bivirkninger

Deltagelse i studien eller ønske å trekke seg fra studien bringer ingen form for fordeler, ulemper eller bivirkninger.

- Studiedeltakerens ansvar

Deltagelsen medfører ingen form for ansvar for studiedeltakeren/fastlegen

- Eventuell kompensasjon til og dekning av utgifter for deltakere
Det vil ikke bli gitt noen form for kompensasjon for deltakere.

Kapittel B - Personvern, økonomi og forsikring

Personvern

Det vil ikke registreres noen opplysninger om deg. Skjemaene og notatene er i en form som gjør at opplysninger ikke kan føres tilbake til deg. Intervjuszvarene vil bli oppbevart i låst skap. Ingen andre forskere vil ha tilgang til datamaterialet

Utlevering opplysninger til andre

De anonyme opplysninger vil ikke bli utlevert til andre instanser. Svarene vil bli publisert i en form at din identitet ikke kan gjenkjennes.

Rett til innsyn og sletting av opplysninger om deg og sletting av prøver

Hvis du sier ja til å delta i studien, har du rett til å få innsyn i hvilke opplysninger som er registrert om deg under selve intervjuet. Du har videre rett til å få korrigert eventuelle feil i de opplysningene vi har registrert. Dersom du trekker deg fra studien, kan du kun gjøre det før eller under selve intervjuet da det ikke vil være mulig til å spore opplysninger tilbake til deg ved en senere anledning..

Forsikring

Det finnes ingen forsikringsordning som gjelder ved deltagelse i studien.

Informasjon om utfallet av studien

Du vil bli informert om utfallet/resultatet av studien dersom du ønsker det.

Samtykke til deltagelse i studien

Jeg er villig til å delta i studien

(Signert av prosjektdeltaker, dato)

Jeg bekrefter å ha gitt informasjon om studien

(Signert, rolle i studien, dato)

10.5 Request, informed consent and questionnaire for migrant representatives

Forespørsel om å delta i en vitenskapelig undersøkelse

NAKMI (Norsk kompetanseenhet for minoritetshelse) ønsker å gjennomføre en studie blant immigranter og deres stedfortredere. Målet med studiet er å undersøke legens forhold til innvandrerpasienter og immigrantenes forhold til fastlegen i hht. Fastlegeordningen. Noen har positive opplevelser mens andre opplever utfordringene med ordningen.

Vi ønsker å gjennomføre denne undersøkelsen for å kunne belyse eventuelle utfordringene med Fastlegeordningen.

Framgangsmåte

Utvalgte leger og representanter fra innvanderorganisasjoner som er over 18 vil bli spurt om å delta i undersøkelsen. Intervjuet vil bli gjennomført uten tolk og varer i ca. 20 min.

Godkjenninger

Den Regionale komiteen for medisinsk forskningsetikk, Region Sør-Øst og Personvernråd giver for Ullevål universitetssykehus har godkjent undersøkelsen.

Frivillighet

Alle som deltar i undersøkelsen skal gjøre dette frivillig, og man har full frihet til å trekke seg fra undersøkelsen uten at dette får noen uønskede konsekvenser.

Taushetsplikt

Når vi skriver om resultatene av denne undersøkelsen, vil dette ikke være mulig å gjenkjenne enkeltpersoner ut fra beskrivelser av resultatene. Ingen personidentifiserbare opplysninger skal benyttes. Materialet er beskyttet av vanlig taushetsplikt, og alle opplysninger er anonymiserte ved prosjektets avslutning.

Hvis det er spørsmål du lurer på, kan du spørre prosjektmedarbeideren som er tilstede.

Med vennlig hilsen

Prosjektleder
Karin H. Hjelde
Forsker
NAKMI, Ullevål universitetssykehus
Tel. 23 01 60 63

Prosjektmedarbeider
Ursula-Georgine Goth
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Forespørsel om deltakelse i forskningsprosjektet

"Hva skiller innvandrere og norskfødte personer ved bruk av Fastlegeordningen"

Bakgrunn og hensikt

Dette er et spørsmål til deg om å delta i en forskningsstudie for å undersøke om 1.generasjonsinnvandrere bruker Fastlegeordningen på samme måte som resten av befolkningen. Du som representant for en av de 15. største innvandergruppene ble valgt ut til å forespørres fordi du har forståelse og erfaring fra begge kulturene og derfor kan beskrive problemene som blir skapt i møte mellom disse for en utenforstående.

Hva innebærer studien?

Studien (undersøkelsen) består av 3 deler, der vi ønsker å se nærmere på problemene slik pasientene og legene opplever dem. Målet med undersøkelsen er å se om det er forskjeller i bruken av Fastlegeordningen mellom 1.generasjonsinnvandrere og norsk fødte pasienter. Et annet mål er å undersøke hvordan samhandlingen mellom fastlegen og 1.generasjonsinnvandrere blir opplevd av begge partene.

Som en del av undersøkelsen vil vi se om det er konkrete ting som kan fortelle oss om denne ordningen fungerer slik den er ment å gjøre.

Du vil bli intervjuet ved hjelp av et intervjueskjema. Dersom du godtar å bli med i undersøkelsen vil svaret ditt bli registrert på en slik måte at ingen kan identifisere deg etterpå.

Mulige fordeler og ulemper

Intervjuet vil verken medføre fordeler eller ulemper for deg personlig.

Hva skjer med intervjuvarene og informasjonen om deg?

Dine svar vil være anonymisert, skrevet ned under samtalen og deretter oppbevart i et låst arkivskap. Når den anonymiserte forskningsrapporten er ferdig vil alle notater bli destruert.

Intervjuvarene som registreres skal kun brukes slik som beskrevet i hensikten med studien. Det vil ikke bli registrert personlige opplysninger eller andre direkte gjenkjennende opplysninger. Det vil ikke være mulig å identifisere deg i resultatene av studien når disse publiseres.

Frivillig deltakelse

Det er frivillig å delta i studien. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Du må være oppmerksom på at dersom du nå sier ja til å delta, er det ikke mulig å ekskludere dine data ved et senere tidspunkt. Disse er anonyme og kan derfor ikke ekskluderes ved senere anledning. Dersom du har spørsmål til studien, kan du kontakte Ursula Goth på tel.95965969.

Ytterligere informasjon om studien finnes i kapittel A – *utdypende forklaring av hva studien innebærer.*

Ytterligere informasjon om personvern og forsikring finnes i kapittel B – *Personvern, økonomi og forsikring.*

Samtykkeerklæring følger etter kapittel B.

Kapittel A- utdypende forklaring av hva studien innebærer

- Bakgrunnsinformasjon om studien

Det er særlig konsekvensene for innvandrere av å falle utenfor "fastlegeordningen" som er grunnen til å initiere dette prosjektet. I NOU 2005:3 nevnes det at evalueringen av fastlegeordningen bare i begrenset grad har gitt kunnskap om hvordan fastlegeordningen fungerer for "spesielle grupper". I evalueringen går det også frem at pasienter med innvandrerbakgrunn kan oppleves av fastlegen å være "tyngre" enn andre grupper, og at de dermed lett kan oppfattes som en pasientgruppe som er lite lønnsom. Problemene er særlig knyttet til å forstå behandlingen, urealistiske forventninger, kommunikasjons-vansker og inadekvat oppfølging. Folkehelseinstituttet viser til at flere grupper av ikke-vestlige innvandrere er spesielt utsatt for livsstilssykdommer og er overrepresentert både i forhold til risikofaktorer og sykdomshyppighet. I Tidsskrift for Den norske legeforening (Hauff, 2008) understrekes denne problematikken og de tilpasningsutfordringene som migrasjon medfører for samfunnet. I følge HUBRO undersøkelsen benytter befolkningen i de østlige bydelene i Oslo allmennlegevakten mer enn befolkningen i de vestlige bydelene gjør. Innvandrere i Oslo brukte allmennlegevakt mer enn personer med norsk bakgrunn. Situasjonen blir også lagt merke til i andre deler av primærhelsetjenesten som på Legevakten i Oslo, der pasienter med minoritetsbakgrunn er overrepresentert. Pasienter er som oftest registrert med fastlege i systemet, men er likevel nokså ukjent med fastlegeordningen. Dette kan få medisinske konsekvenser da legevakten bare tilbyr øyeblikkelig hjelp og ikke har som oppgave å forebygge eller følge opp sykdomstilstander hos den enkelte. Disse forholdene vanskeliggjør en samordnet behandling av innvandrerpasienter med preg av kontinuitet, god utnyttelse av ressursene, trygge og sikre medisinske oppfølgingsrutiner til den enkelte og et helsesystem som fremmer helhet

Metodisk er studien i 3 deler. Del 1 er kvantitativ og inkluderer opprettelsen av en landsdekkende database med grensesnitt til NAVs registrerte data og Personregisteret for 1. generasjonsinnvandrere over 18 år. Dataene analyseres ved hjelp av SPSS. Del 2 baserer seg på kvalitative metoder. Ved hjelp av intervjuguide vil informasjon fra fastleger og representanter fra de største innvandrergrupper samles inn og klassifiseres og analyseres. Del 3 er en komparativ og kvalitativ studie med kvantitative suppleringer hvor 400 pasienter fordelt på to ulike legevakter vil bli inkludert. Den kvalitative delen vil starte med å undersøke svar på individuelle spørsmål. Deretter identifiseres tema gjennom enkle innholdsanalyser. Resultatene fra den kvantitative delen behandles som i del 1.

- Tidsskjema
Intervju med innvandrerrepresentantene vil foregå i 2008 og 2009.
- Mulige fordeler/ulempes eller bivirkninger
Deltagelse i studien eller ønske å trekke seg fra studien bringer ingen form for fordeler, ulemper eller bivirkninger.
- Studiedeltakerens ansvar
Deltagelsen medfører ingen form for ansvar for studiedeltakeren/innvandrerrepresentanten.

- Eventuell kompensasjon til og dekning av utgifter for deltakere
- Det vil ikke bli gitt noen form for kompensasjon for deltakere.

Kapittel B - Personvern, økonomi og forsikring

Personvern

Det vil ikke registreres noen opplysninger om deg. Skjemaene og notatene er i en form som gjør at opplysninger ikke kan føres tilbake til deg. Intervjussvarene vil bli oppbevart i låst skap. Ingen andre forskere vil ha tilgang til datamaterialet

Utlevering opplysninger til andre

De aidentifiserte opplysninger vil ikke bli utlevert til andre instanser. Svarene vil bli publisert i en form at din identitet ikke kan gjenkjennes.

Rett til innsyn og sletting av opplysninger om deg og sletting av data

Hvis du sier ja til å delta i studien, har du rett til å få innsyn i hvilke opplysninger som er registrert om deg. Dette må i tilfellet gjøres under selve intervjuet. Da har du videre både rett og mulighet til å få korrigert eventuelle feil i de opplysningene vi har registrert. Dersom du trekker deg fra studien under eller rett etter intervjuet, kan du kreve å få slettet innsamlende opplysninger.

Forsikring

Det finnes ingen forsikringsordning som gjelder ved deltagelse i studien.

Informasjon om utfallet av studien

Dersom du ønsker det vil du bli informert om utfallet av studien.

Samtykke til deltagelse i studien

Jeg er villig til å delta i studien

(Signert av prosjektdeltaker, dato)

Jeg bekrefter å ha gitt informasjon om studien

(Signert, rolle i studien, dato)

INTERVJUGUIDEN TIL INNVANDRERREPRESENTANTER

Foreningens navn:

Minoritetsgruppe fra:

Kjønn av medlemmene: Alder:

Medlemsantall registrert og uregistrert:

Dato av etablering av forening:

1. Om Innvandrergruppen forhold til helsetjenesten generelt

Hvilke helsemessige utfordringer har medlemmene i din forening?

-k
-m
-b

Hvordan opplever dine medlemmer selve fastlegeordningen?

Henger dette sammen med den enkeltes botid i Norge?

Kan det være andre faktorer som spiller inn?
Hvis ja hvilke ?

2. Opplevelse av konsultasjonen hos fastlegen.

Er deg bekjent om dine medlemmer bruker fastlegeordningen?

Vet du hvem i familien vurderer legebruk til familiemedlemmene?

Har du fått tilbakemeldinger om hvordan medlemmene dine opplever sin egen fastlege?

Hvilke utfordringer opplever innvandrerpasienter med sin fastlege?

Konfidensielt

Side 1

Hvilke kulturelle problemstillinger kan bli en utfordring for pasienten/ fastlegen?

Er du kjent med og kan du fortelle om enkelthistorier i forbindelse med fastlegemøtene?

Mener medlemmene at behandlingen er lik for nordmenn og innvandrere?

Hvor stor andel mener du tenker slikt?

3. Kommunikasjon med legen

Har den enkelte opplevelse at kommunikasjonen med legen er tilfredsstillende?

Vet du om det brukes tolk i tilfeller med dårlig felles språkforståelse?

Hvem foretrekkes som tolk og hvorfor?

4. Bruk av nødtime og legevakt

Foretrekker medlemmene å bruke Legevakt fremfor fastlegen?
Hvis ja, kjenner du til årsaken?

Hvilke konsekvenser mener du dette kan innebære?

5. Samarbeid med 2. linjetjeneste/spesialister

Ser du noen utfordringer når det gjelder henvisning/samarbeid i fht. Spesialisthelsetjenesten for dine medlemmene?

Har medlemmene opplevd problemstillinger når det gjelder gjeldende formaliteter og regleverk?

6. Hvor ser du mulighetene til forbedring til innvandrerpasienter og fastlegeordningen?

10.6 Approval for the data owner and the Ministry of Health



Helsedirektoratet
Postboks 7000 St. Olavs plass
0130 OSLO

Deres ref
09/164

Vår ref
200902387-/VAS

Dato
14.08.2009

Dispensasjon fra taushetsplikten i forbindelse med utlevering av opplysninger til forskning - Innvandreres bruk av fastlegeordningen

Helse- og omsorgsdepartementet viser til brev fra Helsedirektoratet datert 5. mai 2009, samt senere korrespondanse.

Overføringen av forvaltningsansvaret for Helse- og omsorgsdepartementet fra Arbeids- og velferdsdirektoratet til Helsedirektoratet bød på en rekke praktiske og lovtekniske utfordringer. En av disse utfordringene var å sikre Helsedirektoratet de samme fullmaktene som tillå Arbeids- og velferdsdirektoratet før overføringen av ansvaret. Dette arbeidet er ikke fullført.

Forvaltningsloven § 13d første ledd gir departementet myndighet til å åpne for at et forvaltningsorgan gir ut opplysninger til forskning, som ellers ville vært taushetsbelagte. Hvilket departement som gir dispensasjon fra taushetsplikten avhenger av hvem som til enhver tid har det konstitusjonelle ansvaret. Arbeids- og inkluderingsdepartementets myndighet etter forvaltningsloven § 13d første ledd er delegert Arbeids- og velferdsdirektoratet, hva angår sistnevntes ansvarsområde innen folketrygdloven, jf forskrift 2006.06.30 nr. 735. En lignende delegasjon av Helse- og omsorgsdepartementets myndighet etter forvaltningsloven § 13d første ledd er gitt til Helsedirektoratet, men kun innen helse- og sosialsektoren, jf brev fra Helse- og omsorgsdepartementet av 2. mars 2005.

Departementet ser det som hensiktsmessig at Helsedirektoratet også delegeres myndighet til å bestemme at opplysninger vedrørende kapittel 5 i folketrygdloven kan utleveres, jf. forvaltningsloven § 13d første ledd. Dette vil gi Helsedirektoratet en mer

Postadresse

Kontoradresse

Telefon
22 24 90 90
044 99
983 887 405

Telefax

Saksbehandler
Vegard Skaur

komplett portefølje av fullmakter i forhold til ulevering av opplysninger til forskning, samtidig som statusen fra før 1. januar 2009 videreføres.

Vedlagt dette brevet følger kopi av delegeringsvedtak sendt Lovdata for publisering. Departementet gjør for ordensskyld oppmerksom på at Lovdata har anledning til å gjøre redaksjonelle endringer, og at offisiell versjon blir å finne i Lovdata sine publikasjoner.

I søknaden fra Oslo universitetssykehus HF v/ Ursula-Georgine Goth etterspørres opplysninger innsamlet i forbindelse med fastlegeordningen. Det er uklart for departementet hvorvidt de opplysninger som etterspørres er omfattet av departementets delegasjon av 2. mars 2006, eller om en utlevering er avhengig av en delegering av myndighet til å gi dispensasjon på Helsedirektoratets ansvarsområde innen folketrygdloven. Departementet overlater til direktoratet å foreta de nødvendige vurderinger, herunder om opplysninger skal gis ut i den konkrete saken og eventuelt om det skal stilles vilkår i et eventuelt utleveringsvedtak. Vi ber samtidig om at søknaden behandles raskt, da søknaden på bakgrunn av en rekke uheldige omstendigheter allerede har ligget lenge.

Ursula-Georgine Goth er informert om vår oversendelse ved kopi av dette brevet.

Med vennlig hilsen

Kjell Rønnesdal
Kjell Rønnesdal e.f.
avdelingsdirektør

Vegard Skaug
Vegard Skaug
seniorrådgiver

Kopi: Oslo universitetssykehus HF v/ Ursula-Georgine Goth, 0407 OSLO

Vedlegg 1

10.7 Approval from the data protection officer and the ethics committee

Ursula G. Småland Goth

Fra: Ruud Kim Henrik [Kim.Henrik.Ruud@ulleval.no]
Sendt: 22. desember 2008 13:02
Til: uschl_goth@hotmail.com; ursula.goth@nakmi.no
Kop: Thorstensen Heidi
Emne: Personvernombudets tilråding: Goth/UUS - "Hva skiller innvandreres og norskfødte personer ved bruk av Fastlegeordningen"
Vedlegg: REK-Forespørsel om deltakelse i forskningsprosjektet- fastleger11.doc; REK-Forespørsel om deltakelse i forskningsprosjektet- innvandrere3.doc; REK-Forespørsel om deltakelse i forskningsprosjektet-pasienter1.doc; bruken av fastlege meldeskjema.doc

[Det følgende er en formell tilråding fra personvernombudet. Les forutsetningene nøye og ta vare på denne eposten]

Kjære forsker

Viser til melding om behandling av personopplysninger / helseopplysninger. Det følgende er et formelt svar på meldingen. Forutsetningene nedenfor må være oppfylt før rekruttering av pasienter til studien kan starte.

MANDAT FOR TILRÅDING

Med hjemmel i Personopplysningsforskriftens § 7-12 jf. Helsenæringslovens § 36 har Datatilsynet ved oppnevning av Heidi Thorstensen som personvernombud ved UUS, fritatt sykehuset fra meldeplikten til Datatilsynet. Behandling og utlevering av person-/helseopplysninger til forskning meldes derfor til sykehusets personvernombud. Personvernombudet tar stilling til om melding er dekkende eller om det må søkes om konsesjon hos Datatilsynet. Se forøvrig www.datatilsynet.no for oversikt over oppnevnte personvernombud.

Undertegnede har på fullmakt fra personvernombudet behandlet meldingen og uttaler seg på hennes vegne.

TILRÅDING MED FORUTSETNINGER

Personvernombudet har vurdert den planlagte databehandlingen av personopplysninger/helseopplysninger og vurderer denne til å tilfredstille forutsetningene for melding gitt i personopplysningsforskriften § 7-27 og er derfor unntatt konsesjon. Personvernombudet har ingen innvendinger og tilrår at studien gjennomføres med den planlagte behandlingen av person- / helseopplysninger under forutsetning av følgende:

1. Behandling av personopplysninger/helseopplysninger i studien skjer i samsvar med og innenfor det formål som er oppgitt i meldingen (se vedlagte meldeskjema)
2. NAVISB innvilger søknad om kobling av anonyme data. Kopi av dispensasjoner skal sendes personvernombudet.
3. Studien remeldes på eget skjema (se www.uus.no/personvern) hvert tredje år, første gang i 31.12.2011.
4. Melding pr. epost om avsluttet studie sendes personvernombudet senest 31.12.2012.
5. Positiv uttalelse er innhentet fra Regional Komité for medisinsk forskningsetikk ("REK"). Evt. endringer til pasientinformasjonen fra komiteen forevises undertegnede i god tid før de effektueres.
6. Studien er godkjent av ledelsen ved alle impliserte avdelinger og av forskningsutvalget ved sykehuset, og er registrert hos FOU v/Evi Faleide

ENDRINGER

Dersom det underveis i studien blir aktuelt å gjøre endringer i behandlingen av de aidentifiserte dataene, eller endringer i samtykket, skal dette forhåndsmeldes til personvernombudet.

Intern saksnr. på studien hos personvernombudet er: 1206

Lykke til med studien!

Mvh

Kim Henrik Ruud
Personvernrådgiver

Kompetansesenteret for personvern
Ullevål universitetssykehus HF

UNIVERSITETET I OSLO
DET MEDISINSKE FAKULTET

Seniorforsker Karin H. Hjelde
NAKIM
Ullevål universitetssykehus
Internpost

Dato: 07.10.2008
Deres ref.:
Vår ref.: 437-08437c, 2008/10427

KOPI

Regional komité for medisinsk og helsefaglig
forskningsetikk Sør-Øst C (REK Sør-Øst C)
Postboks 1130 Blindern
NO-0318 Oslo

Telefon: 228 44 667
Telefaks: 228 44 661

E-post: rek-sorost@medisin.uio.no
Nettadresse: www.etikkom.no

Hva skiller innvandrere og norskfødte personer ved bruk av Fastlegeordningen?

Vi viser innsendt skjema for protokolltillegg og endringer for ovennevnte prosjekt, med vedlagt revidert informasjonsskriv til studiedeltakerne. Endringsmeldingen er mottatt vårt arkiv 28.01.09.

Endringen gjelder tillatelse til å benytte informert samtykkeskriv som Personvernombud ved Ullevål universitetssykehus og prosjektleder har utarbeidet i samarbeid.

Komiteen har ingen innvendinger til det reviderte samtykkeskrivet, og godkjenner dette.

Med vennlig hilsen

Arvid Heiberg (sign.)
Professor dr.med.
Leder

Tor Even Svanæs
Tor Even Svanæs
Komitésekretær

Kopi: Ullevål universitetssykehus, infeksj. med. ayd. v/ dr. Bjørn Myrvang
Forskningsdirektør Andreas Moan, Ullevål Universitetssykehus

10.8 Standard enrolment letter for the GP Scheme and standard letter sent when changing residence to an address (outside the previous municipality).



13.09.11

HELSEØKONOMIFORVALTNINGEN
081091300734

Returadresse:
HELFO SERVICESENTERET
POSTBOKS 2022
3103 TØNSBERG

MOTTATT
03 OKT. 2011

TILDELING AV FASTLEGE

F.nr. (Oppgi f.nr. ved henvendelser til fastlegeordn.)

Helseøkonomiforvaltningen (HELFO) har på vegne av kommunen tildelt deg fastlege. Legens navn og adresse er oppført nederst på brevet. Tildelingen gjelder fra 01.10.11. Legen vil bli orientert om at du er oppført på hans eller hennes liste.

Dersom du ønsker en annen fastlege enn den tildelte, kan du selv foreta bytte via våre nettsider eller ringe fastlegetelefonen. Et slikt bytte kommer i tillegg til de to ordinære byttene.

SKIFTE TIL ANNEN FASTLEGE

Du har rett til å skifte fastlege opptil to ganger pr. kalenderår. Betingelsen er at det er ledig plass på listen til en annen fastlege.

FASTLEGE FOR BARN UNDER 16 ÅR

Dersom du har barn under 16 år, følger barnet ditt legevalg hvis du ikke velger en annen lege for det.

Dersom du ønsker å bytte fastlege eller trenger nærmere opplysninger kan du:

- gå inn på www.helfo.no
- ringe fastlegetelefonen 810 59 500

For informasjon om pasientreiser: www.pasientreiser.no Tlf: 05515.

Vennlig hilsen
Helseøkonomiforvaltningen (HELFO)
Fastlegeordningen

Ta vare på opplysningene som står nedenfor.

Navn: Fødselsnummer:
Fastlege:
Adresse :

Telefon nr.:



5308

POSTADRESSE:
POSTBOKS 2022

3103 TØNSBERG
INTERNETTADRESSE: WWW.HELFO.NO

973966987



24.06.11

HELSEØKONOMIFORVALTNINGEN
061062400727Returadresse:
HELFO SERVICESENTERET
POSTBOKS 2022
3103 TØNSBERG**FASTLEGEORDNINGEN - FLYTTING TIL NY KOMMUNE**

F.nr.

(Oppgi f.nr. ved henvendelser ifbm. fastlegeordn.)

Helseøkonomiforvaltningen (HELFO) har fått beskjed fra folkeregisteret om at du har flyttet. Dersom du allerede er tilknyttet en fastlege og ønsker å beholde denne legen, trenger du ikke å foreta deg noe.

SKIFTE TIL ANNEN FASTLEGE

Hvis du ikke har fastlege fra før, eller ønsker å skifte lege, kan du gå inn på www.helfo.no. Her kan du få opp en oversikt over alle landets fastleger med opplysninger om bl.a. navn, kjønn, adresse og antall ledige plasser. Ved å logge deg på løsningen, kan du selv bytte til en hvilken som helst fastlege med ledig kapasitet. Du kan også melde deg inn eller ut av ordningen.

Alternativt kan du ringe fastlegetelefonen. Dersom du skifter fastlege, vil fastlegeordningen sende deg melding om hvilken lege du er tildelt.

SKIFTE AV FASTLEGE

Du har rett til å skifte fastlege opptil to ganger pr. kalenderår. Betingelsen er at det er ledig plass på listen til en annen fastlege. Skifte av fastlege på grunn av flytting regnes ikke med.

HAR TIDLIGERE HATT FASTLEGE I KOMMUNEN DU NÅ HAR FLYTTET TIL
Dersom du tidligere har vært tilknyttet en fastlege som i dag har full pasientliste, og du har flyttet tilbake til kommunen etter en periode som ikke overstiger tre år, har du rett til å bli tatt inn på listen igjen.

ØNSKE OM Å STÅ UTENFOR FASTLEGEORDNINGEN

Dersom du ønsker å stå utenfor fastlegeordningen, kan du selv utføre endringen via våre nettsider eller ringe fastlegetelefonen. Hvis du allerede står utenfor ordningen og ønsker å fortsette med det, trenger du ikke å gjøre noe.

Dersom du ønsker å bytte fastlege eller trenger nærmere opplysninger kan du:

- gå inn på www.helfo.no
- ringe fastlegetelefonen 810 59 500

For informasjon om pasientreiser: www.pasientreiser.no Tlf: 05515.

Vennlig hilsen

Helseøkonomiforvaltningen (HELFO)
FastlegeordningenPOSTADRESSE:
POSTBOKS 2022

3103 TØNSBERG

INTERNETTADRESSE: WWW.HELFO.NO

061062400727

10.9 The 15 largest immigrant groups in Norway (2001)

The 15 largest immigrant groups in Norway. 1 January 2011. Absolute figures

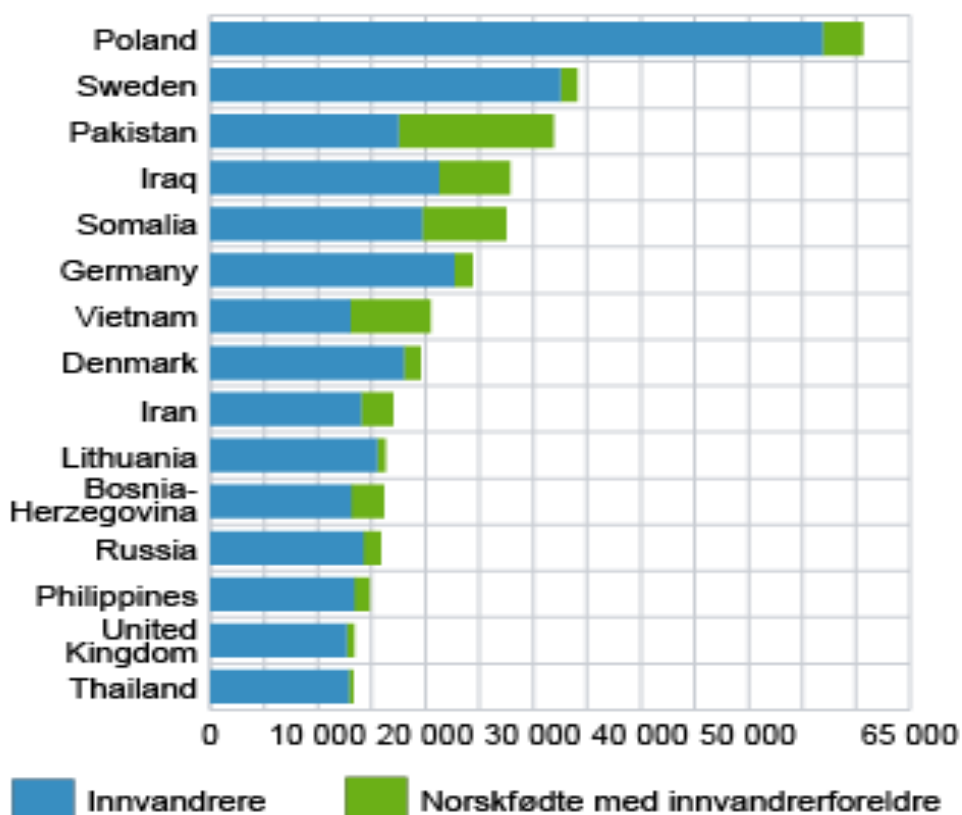


Figure 5 Source: http://www.ssb.no/english/subjects/00/00/10/innvandring_en/fig2-storste-grupper-en.gif (accessed 01.06.2011)

Both, Figure 5 and Figure 1 (chapter 1.3) present the 15 largest immigrant groups, dividing immigrants and Norwegian born decedents for January 2011 and 2007. Within a comparison of the fast changing migration and change of new comers is eminent, illustrating the challenge public authorities are facing regarding the information need about the health system, specifically the GP Scheme.

